Clinical Lectures
ON
DISEASES OF THE URINARY ORGANS.

Delivered at University College Hospital.

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LECTURE XII.

HÆMATURIA AND RENAL CALCULUS.

GENTLEMEN,—I propose to-day to complete the programme I originally designed for this course by considering a phenomenon of common occurrence known as hæmaturia.

Let us define the term. What is hæmaturia? The outflow of urine containing blood in admixture. Thus bleeding from the penis at other times than at that of micturition is, of course, not hæmaturia. Bleeding coincident with micturition from chordee, or operation, or from any known injury in the course of the urethra, is also not to be included. The blood then usually issues by the side of the stream of urine, and is only partially mixed at its line of contact, or it may follow rather than accompany the urine.

Hæmaturia, then, is a symptom. Its presence is, in all cases of urinary disease, to be sought. Hence the inquiry forms one question—the third—of the necessary four which I instructed you always to ask in forming a diagnosis. Here is a glass of urine, evidently containing an admixture of blood. What is the source of it? Now it is often not an easy thing to state at once what point of that long and complicated organic apparatus, which commences in the Malpighian corpuscles and ends at the external meatus, is the source of the blood in question. Sometimes it is exceedingly difficult to define its source. Thus it is that in medicine you will often find some symptom, the pathological cause of which is not very obvious, getting a specific name which comes at length to denote a distinct disease; and just as you will be asked, as I told you the other day, what is good for dropsy, you may also be asked what is good for hæmaturia.

Now, the consideration of this question, besides affording us new material for inquiry, will bring us over some of the ground we have already travelled together. I don't regret that—for your sakes, I mean. It will stand in the same relation to the past as the arithmetical "proof" does to the already worked sum. It is in some respects a synthetical operation following an analytical one. When therefore you see a specimen of urine containing blood, you will, as a matter of course, make a rough mental note of the proportion of blood present, and you will mark the colour. And as you can count on your fingers the ordinary sources of blood, these will pass rapidly in review at the same time. Let us name them as follows:—

1. The kidneys, where it may be from diseased action, more or less temporary, as inflammation; or from disease more or less persisting, as degeneration of structure; or from mechanical injury, as from calculus there, or by a strain, or a blow on the back. If the hæmaturia is the result of inflammation, there will be general fever denoting its presence; if produced by slow organic change, there will be the history of failing health, and probably urine changed in quality otherwise than by the mere admixture of blood. Where blood is in very small quantity, as it will naturally be at times, note the character of the urine proper—whether of low specific gravity, pale, with albumen in greater proportion than blood or pus will account for; perhaps renal casts may be found; and look out for dropsies in any degree. In both the preceding forms, if blood is present it will give the smoke tint to the secretion. Perhaps it may be affirmed that such urine, associated with very little if any local pain, is more likely to come from the kidney than elsewhere. In malignant renal tumour blood may be large in quantity at times: the rapidity of growth, and the size attained, are the marked characteristics of the disease. If mechanical injury be the origin of hæmaturia, there will be the history of a blow or strain; or there may be the signs and symptoms of renal calculus, of which more detail presently.

2. Then, putting aside the ureters, you will remember the bladder as the second source of hæmorrhage; and here it may be due to some acute cystitis, stone, or tumour. The former is obvious enough from muco-pus in the urine, and through other signs; while the second may well be suspected by the symptoms, and its presence realised by the sound. Here the hæmorrhage is usually florid, and in proportion to the patient's movements. But the third condition—namely, that the hæmorrhage arises from tumour—is not always so readily to be affirmed. As a rule, however, blood from such a source is larger in quantity than from stone, and may be associated with less of muco-pus. If the tumour is malignant, it may be felt, and the pain is often severe; if villous, it gives an even pale-red tint for days together to the urine; and in both cases the blood is florid, unless it is long retained in the bladder, when dark sanies, like coffee-grounds, results.

3. In hæmorrhage from the prostate, the third principal locality or source, the same thing occurs, if the organ is hypertrophied and the blood is retained; but here the age of the patient, and the ascertained condition of the organ from the bowel, aid the diagnosis. A slight appearance of blood mixed with the last few drops of urine is a not rare occurrence in chronic prostatitis.

4. When bleeding arises from stricture of the urethra, the patient's history and the cause of the bleeding, almost always instrumental, leave no room for doubt. From the use of instruments also in the bladder hæmorrhage sometimes arises. Then it is not to be forgotten that occasionally blood is found in the urine as the result of violent diuretics, from purpura, in fevers, and in a hæmorrhagic diathesis.

Now for the treatment of hæmorrhage. When you have determined that its source is above the bladder—that is, in the kidney or in its pelvis, probably the first and most influential remedial agent is rest in the recumbent position. Whether from a lesion affecting the intimate structure, or from the mechanical irritation of a calculus in any part of the organ, rest is the first and the essential condition. The patient is, moreover, to be maintained in as cool and tranquil a state as possible.

It is in renal more than in any other form of hæmaturia, perhaps, that direct or internal astringents or styptics are useful. I shall do no more than name those which are most commonly used—namely, gallic and tannic acids; lead and turpentine; equal to them is, I think, the infusion of matico, say in doses of two ounces every two or three hours. The tincture of iron and also sulphuric acid may sometimes be taken with advantage.

It is, however, in cases of severe hæmorrhage from the bladder, or more commonly from an enlarged prostate, that active and judicious treatment is necessary. You will be called sometimes to a patient whose bladder is distended with coagulated blood, or who is passing frequently a quantity of fluid in which blood is the predominating element. Usually this has arisen from some injury inflicted by the instrument, although it may also be from tumour of the vesical walls. Here you will keep the patient on his back, and forbid the upright position, or any straining, so far as you can prevent it, in passing water. To this end give opium liberally, to subdue the painful and continued action of the bladder. Apply cold by means of bags of ice to the perinæum and above the pubes. Better still, introduce small pieces of ice into the rectum. Do not use an instrument if it is possible to do without it. There is a great dread in some people's minds about the existence of a large coagulum in the bladder. I have even known a bladder to be opened above the pubes by the surgeon for the mere purpose of evacuating a mass of clotted blood. Leave it alone: it will gradually be dissolved and got rid of by the continued action of the urine; while if you are in haste to interfere, and are very successful in removing it, you will succeed also most probably in setting up fresh hæmorrhage. The bleeding vessels have a far better chance of closing effectually if they are not subjected to mechanical interference. Meanwhile support the patient's powers by good broths, &c.

But it sometimes happens that hæmorrhage occurs in a patient who has long lost all power of passing urine except by catheter. This is a very different position. Here the coagulated mass which fills the bladder must sometimes be removed, or no urine can be brought away. Thus, you introduce a catheter and none appears, for the end of the instrument passes into a mass of coagulum, and nothing can issue. Sometimes sufficient may be removed by attaching to a large silver catheter a six-ounce syringe or a stomach-pump. Clover's lithotrity

apparatus has answered remarkably well with me in two or three instances. Let me caution you never to inject styptics into the bladder; the irritation does more harm than good.

In passing to another subject I beg to call your attention to a glass before you containing some urine of a dark and somewhat unnatural tint. Let us interrogate the case of the patient from whom it came. In obtaining this specimen I took care that he should first pass about an ounce into a separate vessel to clear his urethra—a precaution always absolutely necessary to avoid error, as I have before warned you—and the remainder into this. It is less translucent than average healthy urine is, and has a deeper colour. The hue is not red, but slightly orange, with a dirty brownish tint, commonly and very well distinguished by the word "smoky." That tint denotes blood to an ordinarily practised eye. Why is it not red? Because blood after a certain term of contact with urine loses its red colour and becomes brown; and you see it in that condition, or according to the quantity, producing any depth of hue from this up to that of London porter. Put it under the microscope, and you will find plenty of blood-corpuscles. We get this broad principle, then, to start with: bleeding from the more distant parts of the urinary system, unless in very large quantity, will almost certainly make the urine brown, while urine which contains red blood has almost certainly issued recently from some source in the bladder, probably at or near its neck, these being the more common sites of vesical hæmaturia.

In the case before us, then, we proceed easily and rapidly to eliminate many of the sources of bleeding by physical exploration, and by the account which he gives of his sensations. He makes a good stream when a fair amount of urine has accumulated in his bladder, but this does not often happen, for he passes it every two hours or less in the day, not so frequently at night; no straining is necessary. Pain in the course of the urethra is experienced during and after micturition; not severe. He is uneasy about the pelvis and loins on taking exercise, and more blood passes afterwards. He is somewhat emaciated, and so presents a good condition for examination by the hand. He is subject to variation in the intensity of the symptoms, having now and then attacks of a few days' duration, in which they are aggravated, and he dates their commencement in an attack which occurred seven years ago. His age is forty-five years. He has never passed gravel. He is much less robust than formerly; his digestion is not good. A full-sized bougie passes easily into the bladder; no stricture; hypertrophy of prostate at his age not possible. On sounding he is manifestly more tender than usual; nothing is felt, nor any deviation from the natural condition by simultaneous examination by the rectum. Palpation of lower part of abdomen shows nothing. Arriving close under the last ribs of left side with one hand, the other pressing firmly on left renal region, he flinches unmistakably; that is the spot, he says, where he feels pain at times and on movement: right side, nothing. We examine his urine: sp. gr. 1018, acid, small brownish deposit on standing; under microscope, blood-corpuscles, some pus-corpuscles, epithelium, no crystals, no casts; albumen a little; corresponding with organic matters present.

What is the seat of the lesion in his case? Perhaps the bladder: we found it tender to the sound, and it acts with undue frequency. Yet remember this is by no means evidence of any primary morbid change there, such conditions constantly accompanying diseases affecting primarily the kidneys or the upper part of the ureter. Much more probably the kidney. The manifest local tenderness, the repeated attacks, the impaired health, the history, the absence of all the more common causes of cystitis in any form, point to the left kidney as the seat of mischief. The absence of albumen and of renal casts—a fact of not much weight, although their presence is of the utmost importance—lead us to believe him free from organic changes affecting the renal organs. I conclude that his left kidney is the seat of calculus, although he has never passed one, and has at present no crystalline deposit in his urine—a fact by no means essential to the diagnosis; and that this calculus is the source of the blood and pus found in his urine.

It is sometimes not easy to say what kind of calculus exists in these cases, of which this is a fair type. When any calculous matters have been passed which can be examined, or when the crystalline deposit in the urine is constant, the inference is pretty clear. Add to this that the probability in any case is strong in favour of uric acid, from its known frequency of occurrence—taking large numbers, say at least fifteen to one as compared with oxalate of lime.

For treatment: Alkaline diuretics and diuretic vegetable infusions, before named, for a period of time; attention to the digestive functions and to that of the skin, for the kidneys are probably working too much vicariously for some other function acting lazily; moderation in highly nitrogenised food; mild alcoholic drinks, perhaps in most cases permitting only a light and mild Bordeaux. Of all medicinal remedies, perhaps none are so valuable as mineral waters, especially those which have sulphate of soda largely diluted as the main ingredient. Take Carlsbad as a type. For two well-known remedial agents, which are very popular, each among its class, I am bound to tell you I have very small esteem. In town, it seems to me that every man advises his neighbour, and on every pretext, to drink Vichy water—advice which is cheap, and of which the value in most instances by no means exceeds the cost. In the country, where perhaps the fairer sex more usually dispense similar aid to their suffering neighbours, the prescription is mostly gin-and-water. Of the first, or natural product, which is a strong solution of carbonate of soda, I must say that, if not absolutely injurious, it is at least greatly inferior to potash; and of the second, or artificial one, that it is about as serviceable to the kidneys as a pair of spurs to a jaded horse—makes him travel for a time, but takes it out of him in the long run. For the paroxysms of severe pain which denote the passage of a renal calculus, it must suffice here to name, hot hip-baths with diluents, and anodynes in liberal quantity.

I shall here, by way of episode, refer to a mode of determining the true characters of a patient's urine, which is of extreme value in some doubtful cases — a mode which has never to my knowledge been recommended or practised, and which I have systematised for myself. I have already told you how essential it is to avoid admixture of urethral products with urine, if you desire to have a pure specimen. It is sometimes quite as essential to avoid its admixture with products of the bladder. And I defy you to achieve an absolute diagnosis—by which I mean a demonstration, and never be satisfied with less if it be practicable,—in some few cases, without following the method in question. When therefore it is essential to my purpose to obtain an absolutely pure specimen of the renal secretion, I pass a soft gum catheter of medium size into the bladder, the patient standing, draw off all the urine, carefully wash out the viscus by repeated small injections of warm water (before shown to be rather soothing than irritating in their influence), and then permit the urine to pass, as it will do, guttatim, into a test tube or other small glass vessel for purposes of examination. The bladder ceases for a time to be a reservoir; it does not expand, but is contracted round the catheter, and the urine percolates from the ureters direct. You have, indeed, virtually just lengthened the ureters as far as to your glass. And now you have a specimen which, for appreciating albumen, for determining reaction, and for freedom from vesical pus and even blood, and from cell growths of vesical origin, is of the greatest value, and has often furnished me with the only data previously wanting to accomplish an exact diagnosis. Mind never to be satisfied to guess at anything; make, very cautiously if you will, your provisional theories about a doubtful case—indeed, the intellectual faculty will do this constantly, and without reference to the will,—but arrive at no conclusion, take no action, except so far as you are warranted by facts.

I have reserved these few words to the last, as the most important. The first words I uttered in this course were designed to convey to you my strong sense of the importance of acquiring the habit of making an accurate diagnosis, and a rapid one if possible. My last shall be to express once more the same conviction. Not because I undervalue the subject of treatment, but precisely with the opposite view; being anxious above all things that you and I should afford some essential service to those who have confided to us the care of their maladies. I adjure you to spare no pains to obtain the most complete knowledge of the complaint itself, since it is the only mode of arriving at a knowledge of what will be sound and efficient treatment.

I beg to thank you for the extreme attention and assiduity with which you have followed me during this course, and to assure you that such a manifestation on your part has rendered our meetings for these colloquial discourses some of the most agreeable relaxations which have fallen to my lot, to vary the routine of an anxious and very active professional life.

MEDICAL PRIZE IN BELGIUM. — The quinquennial prize of £200 for the best medical work published in Belgium between 1861 and 1865, has just been divided between M. Meynne, military surgeon, for his "Medical Topography of Belgium," and M. Melsens, for his "Essay on the Use of Iodide of Potassium in Lead and Mercurial Affections."

ON

SOME NEW METHODS OF TREATING DISEASES OF THE CAVITIES OF THE NOSE.

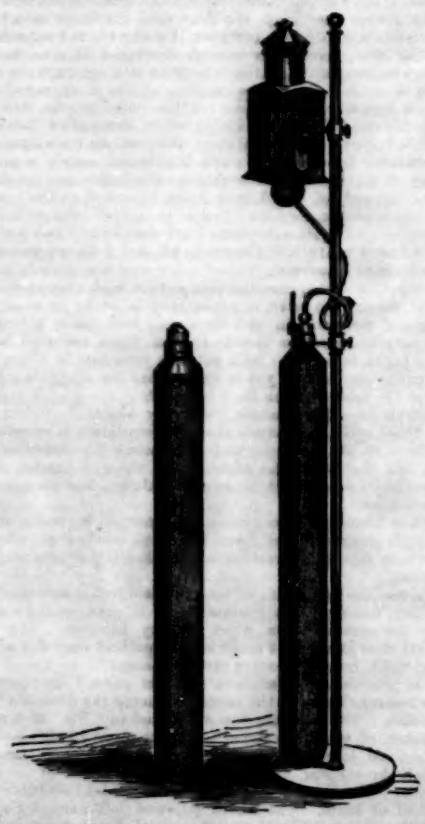
BY J. L. W. THUDICHUM, M.D.

I. *The Medical Lantern.*

"Away now with your oil-lamps!"

THOSE who have tried sunlight for the inspection of the nose or larynx, and compared it with the light given out by oil-lamps specially adapted to the operation, and provided with complicated condensers, must have come to the conclusion that the latter are relatively useless. At all events, my own practice soon made me dissatisfied with such arrangements as Tobold's lamp—instruments which I found top-heavy and unstable, and whose horizontal beam of light did not satisfy my demands for inspection, much less my requirements for illumination during operations. I therefore established a platform before the window of my consulting room, in order to be able to utilise sunlight, thrown into the room by means of a heliostat, on all practicable occasions. Some diagnoses and operations which I had opportunities of making by the aid of this light, and which I am convinced could not have been made with the aid of an oil-lamp, however artfully devised, caused me to construct the following adaptation of Drummond's light to medical purposes:—

A small lantern carries the arrangements which are required for the production of the spirit-oxygen-lime light. The glass



spirit-lamp is screwed into the bottom of the lantern, in order that the level of the spirit may be always accessible to the eye. The rest of the arrangements, including an annular ditch round the burner, to be filled with water intended to cool the burner, are inside the lantern. The oxygen is supplied from an iron bottle underneath the lantern, in which it is contained under pressure produced by the condensation in it of several atmospheres of gas. A delicate screw-valve, moved by a lever, easily regulates the flow of gas. The bottle and lantern are fixed to a stand, being a brass rod screwed in a heavy circular iron plate. Any position can be imparted to the lantern by means of the ball-and-socket joint on its attached side, and the screw sliding clamp, which fixes it to the rod. The light passes through a system of condensers in front of the lantern, and can be brought to a focus at any desired distance by the sliding arrangement of the bottom of the lantern which carries the light. The instrument, including the compressed gas, is manufactured and sold by Mr. John Orchard, optician, of Kensington.

The lantern in this form is eminently practical. It is easily lighted: a match inflames the spirit, the lime is fixed by its side, the oxygen is turned on, and within a minute or two a splendid beam of light is projected from the condensers. The direction of the beam is readily adapted to the requirements of the operator. For laryngoscopy and rhinoscopy he carries the concave mirror on his forehead over a screen, which, as the light comes from above, can be so adjusted as to completely protect the eye from any incident rays, and leave it all its pupillary space for the inspection of the illuminated cavities. The lamp is put out as easily as it is lighted: the oxygen is turned off; the lime-cylinder buried in lime-powder in a suitable receptacle; the spirit extinguished by a brass cap which fits into the water-ditch. The amount of gas in the bottle can always be controlled by a pressure guage to be screwed on to the top of it. A full reserve bottle is always kept in store, and any empty bottle is at any time refilled by the maker. I pronounce this apparatus (which I exhibited last year at a *conversazione* at the Royal College of Physicians, and which I have now tried on many occasions during nearly two years,) to be perfect, and greatly to be recommended to the profession, particularly for application in hospitals, but quite as suitable for the consulting room of either physician or surgeon.

II. *Rhinoscopy and Nasal Specula.*

Hitherto the inspection of the nasal cavities from the side of the pharynx, choanoscopy, has been practised much more systematically than that through the nostrils. This has arisen through the impetus given to laryngoscopy, of which rhinoscopy was considered to be a mere appendix. But the neglect of what, in contradistinction from posterior rhinoscopy or choanoscopy, I will term anterior rhinoscopy, is mainly due to the remarkable circumstance, that there were no proper specula by means of which this operation could have been accomplished. The only speculum I could find in the shops bore the name of Liston, and was not suitable for my purpose. I therefore constructed a series of specula to suit many cases and requirements, and ultimately retained the following forms as highly practical:—

Two valves are held together by a spring, and when compressed form a canal of oval bore, about ¾ in. in length. The valve which expands the ala is from ¼ in. to ⅜ in. longer than the valve which is placed against the septum. This latter inner valve should never be long enough to reach the sensitive part of the mucous membrane of the septum. It follows from this that each nostril requires its own speculum. There must therefore be for each case a right and a left speculum. As the nostrils of different persons vary greatly in size, different sizes of pairs of specula must be at hand in practice. The speculum is inserted into the nostril while closely compressed; the mo-

ment the spring is liberated the nostril is fully expanded, and if the operator now draws the spring, which serves also as handle, upwards, the cavity of the nose can be fully inspected. The speculum therefore is designed exclusively to expand the atrium or membrano-cartilaginous part of the nostril; if it were allowed to enter beyond this, and to reach the isthmus formed by the unyielding cartilaginous septum and the nasal margin of the ascending branch of the upper maxillary bone, it would cause pain, and narrow by its own thickness this small passage. The new specula, several sets of which have been made for me by Messrs. Weiss, cause no pain, widen the atria to the utmost extent, and admit of the introduction through them, into any part of the nose, of instruments necessary for slight, delicate, or severe operations.

(To be continued.)

ON THE

RECOVERY OF SIGHT AFTER ATROPHY OF THE OPTIC DISCS.

BY ROBERT P. OGLESBY, ESQ., M.R.C.S.,
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To watch from day to day the changes which take place in the optic discs of patients suffering from intra-cranial and spinal mischief, is at once both interesting and instructive; and the amount of knowledge so gained by the physician must be to him most valuable. The fact that comparatively few patients suffering from early changes in the optic discs, depending on brain or spinal disease, seek the aid of the ophthalmic surgeon, renders it rather a difficult task for him to collect a great amount of evidence regarding the very earliest deviations from health which the discs undergo.

Unfortunately, patients too often seek the oculist's aid suffering from atrophied discs: the sequence of intra-cranial mischief long since passed; mischief probably already repaired; mischief not now to be defined. Such may have been a cerebral hæmorrhage, a lesion of brain-substance, or a syphilitic deposit.

I have been led to inquire how far recovery of sight be possible after the optic discs have become decidedly atrophied, and loss of vision has resulted; and, if possible, in what proportion of cases, and in how many, benefit is derived from treatment in the early stages, or recovery of sight takes place without any treatment whatever.

So far I have failed to discover any particular form of amaurosis which is more amenable to treatment than another, or any particular form which spontaneously recovers. Yet I firmly believe that, with more extended observation, we shall arrive at definite conclusions on this point.

We may affirm, without any doubt, that atrophy of the optic discs is either a curable disease, or, at any rate, capable of spontaneous recovery; for we possess ample proof that one or other of these events not unfrequently takes place.

Having met with some of these cases undergoing early convalescence, I have watched from day to day the gradual symptoms of improvement, and have reason to believe that a fair proportion of patients whose vision has been lost from atrophy of the discs recover a little sight—perhaps sufficient to enable them to earn a livelihood in occupations not requiring good vision. A much smaller proportion recover almost perfect vision, and are able to return to their usual employments.

It is a matter of great difficulty to form even an imperfect idea as to the number of those patients who regain vision, on account of the great length of time which generally elapses before recovery commences. Four, six, or perhaps more, years may intervene between the loss of vision and the recovery of sight. Until, therefore, my observations can be more widely extended, I shall refrain from expressing any opinion on this head.

The early symptoms of returning vision in these cases appear to be—first, a passing glimmer now and again of a jet of gas or the blaze of a bright fire; afterwards, a pretty correct knowledge of the situation of the light so seen. In this stage convalescence often remains stationary for a considerable time. The second stage is shown by a better judgment of the size of objects and of distance, and the patient can distinguish between an adult and a child, and begins to avoid objects likely to impede locomotion, such as chairs, tables, &c. In the third stage the discernment of colours is accomplished, and after this recovery is generally very progressive.

Some cases appear to be benefited by active treatment during the early stages, but whether such be really the case or not is at present doubtful. Some cases placed under active treatment in the early stages have rapidly recovered, as will be seen by the appended notes.

I have under my care at the present time an amaurotic patient (simple atrophy) whose discs are undergoing the first step towards convalescence. He is now just able to see a bright fire or brilliant jet of gas. This a very short time ago he could not do. I am much disappointed that I cannot trace any alteration in the colour of the discs, as in the cases I am about to mention; still, I have but little doubt that he will regain useful vision. (See notes of Case 1.)

A middle-aged woman came under the care of Mr. Pridgin Teale on account of failing sight. She was also suffering from locomotor ataxy. She stated that ten days previously she awoke after a good night's rest with double vision and dimness of sight. The discs presented marked atrophy, and vision was limited to 20 Jaeger. Mr. Teale kindly placed the woman under my care. Under the influence of large doses of iodide of potassium the most pleasing results followed. At first, sight began to improve; then (and I lay great stress on the following fact) the white discs began to alter in colour—began to assume a more natural tint; and lastly, I had the satisfaction of seeing a healthy appearance of the discs restored, followed by good vision. (See notes of Case 2.)

A third case, of which notes are given, I had the opportunity of watching from its commencement. The patient, a boy, was suffering from optic neuritis in its early stages, accompanied by symptoms indicating tubercular mischief within the cranium. I made a drawing of the discs and used it as a means of comparison at each ophthalmoscopic examination. When first seen the discs were very large, of a deep pink and much raised, and the vessels were slightly tortuous. By degrees the redness and swelling disappeared, the vessels decreased in size, but increased in tortuosity. After a further lapse of time the discs began to assume a pale appearance, which in course of time merged into a brilliant white. After remaining in this condition for some time I was delighted to recognise the faintest possible trace of capillary tint in the left disc, which day by day became more visible, until it attained nearly a normal colour. With increasing vascularity came increasing functional power, not only of eye, but of brain also, and at the present time the appearance of the left disc is normal. Vision is No. 1 Jaeger, and all brain symptoms have vanished. The right disc still remains white, and the eye is blind. I have great hopes of its ultimate recovery.

It is not, however, essential that an optic disc, once atrophied, should resume its normal appearance in order to regain its functional powers. In the remaining two cases, a lapse of time varying from four months to four years occurred before vision began to return. Both patients were totally blind, both now enjoy good vision, yet in neither has the slightest alteration in the colour of the discs taken place along with restoration of vision. They remain brilliantly white.

In these cases, I conclude that the circulation is restored in the fibres of the nerve immediately before it pierces the sclerotic, and that the fibres which enter the eye participate in the healthy action which renewed circulation has imparted to those behind.

In the history of these cases, we ascertain beyond a doubt that optic discs suffering from the most marked atrophy are sometimes capable of restoration to a healthy appearance and function.

In a medico-legal point of view, the subject is extremely interesting, bearing most intimately, as it does, on the various trials for compensation after railway injuries. Can any medical man affirm that an amaurotic patient may not obtain useful sight, or even recover perfect vision?

It is interesting to observe that the cases I am recording differ remarkably as to the cause producing the disease of the optic disc. The first case was attributed to "fits" of a slight character, of which no definite account could be obtained. I am inclined to suspect that it may have been an instance of smokers' amaurosis. The second was the result of acquired syphilis. The third appeared to be dependent on tubercular mischief of brain. The fourth followed left hemiplegia, and the fifth was caused by the meningitis of rheumatism.

CASE 1.—November, 1867.—James C——, aged nineteen years, suffers from atrophied discs. He states that from childhood he has frequently had severe attacks of pain in the head,

accompanied by vomiting. Thirteen months ago he had an attack more than usually severe, which was followed almost immediately by a dimness of vision of left eye. The sight of this eye remained dim for three months; he then had "horrible pain in the head," followed by dimness of right eye. Three weeks later he had two fits, which left him unconscious for a short time, and rendered him totally blind, but did not affect either hands or legs. He remained in this condition for some time (exact time not known). He then, by looking sideways, was able to discern very faintly the outline of a bright jet of gas. At the present time he can direct his hand towards any bright flame with precision. Both discs are quite white; vessels slightly tortuous.

Feb. 1868.—Now states that he has smoked half an ounce of tobacco every day for several years past. Vision: "I can tell if it be a big or a little man that is passing me in the street now." Discs unaltered in appearance.

CASE 2.—C. F——, a married woman, aged fifty, came under the care of Mr. Pridgin Teale in Nov. 1866, and was transferred to my care. She came on account of a sudden impairment of vision. Married at twenty-five; never pregnant. Three or four years after marriage took syphilis from her husband. Several years ago nursed her mother during a long illness, and ever since she has suffered from shooting pains in the back and legs. She describes the pains as "jumping," and says that they prevent her sleeping at night. Sensation of numbness in the feet, as if "walking on cockle-shells." Her gait is unsteady, and she has difficulty in balancing herself when her feet are placed close together; muscular power unimpaired. Ten days ago she awoke with dimness of sight and double vision. There is ptosis of the left eyelid, and paralysis of the internal rectus of the same eye. On examination by the ophthalmoscope, both discs are found to be white, and present the appearance of simple atrophy. Vision barely No. 20 Jaeger.

Jan. 1867.—No improvement; discs very white. Left eye cannot read No. 20 Jaeger; right eye reads No. 16.

March 5th.—Ordered iodide of potassium. Under this treatment she rapidly improved.

16th.—Left eye reads No. 20 Jaeger; right eye No. 4. Discs resuming a natural appearance.

April 9th.—Reads No. 4 with each eye. Optic discs almost natural. The general health is also much improved; she walks with more steadiness; double vision has disappeared, but ptosis and strabismus remain.

CASE 3.—March 26th, 1867.—Thomas R——, aged thirteen years, complains of defective vision. His mother, who accompanies him, gives the following history:—The whole of her children have shown a decided phthisical tendency. One or two have died during early childhood of consumption, and the remainder still living are all delicate. The subject of the present history is a pale, weak-looking boy, and decidedly small for his age. When two years old he suffered from "fits," which left him very weak. For the past six weeks he has complained of acute pain in the right side of the head. After this pain had existed three weeks, his sight became somewhat dim. Alarming symptoms of increasing blindness rapidly followed, and warned his parents to seek medical aid. His vision previously had been good. He has of late suffered from a heavy, numb sensation in the left arm and leg, there being a slight, though not a decided, loss of motor power in the arm.

History of right disc.—It is in the acute stage of optic neuritis; it is larger in circumference than its fellow, and, perhaps, somewhat more raised and vascular. The vessels are slightly tortuous; vision sees shadows only.

April 9th.—The disc remains unaltered in appearance; vision—shadows only.

24th.—The disc is less vascular and smaller, and the vessels more tortuous. The pupil is dilated, and acts sluggishly.

30th.—Atrophy of disc commencing.

May 7th.—Atrophy of disc very evident; vision—shadows only.

July 4th.—Disc small; vessels more tortuous; vision entirely gone.

Oct. 22nd.—No alteration in appearance of disc. Vision gone.

History of left disc.—March 26th: Is in the early stage of optic neuritis. It is less raised and vascular than the right. Vessels slightly tortuous. Vision, No. 4 Jaeger.

April 9th.—The disc is more raised, and vascularity more apparent. Vision, 16 Jaeger.

24th.—Disc less vascular; pupil dilated. Vision, not 20 Jaeger.

30th.—Vision somewhat improved. Disc commencing to atrophy.

May 7th.—Atrophy of disc very apparent. Vision improving.

July 4th.—Marked improvement in vision. Although the disc is still very white and the vessels tortuous, he can read No. 1 Jaeger.

12th.—Disc assuming a faint capillary tint.

August.—Disc almost normal in appearance.

October.—Disc quite normal in appearance. Vision, 1 Jaeger.

In this case cod-liver oil was prescribed, and the patient improved very materially in his general health under its influence. On first seeing the boy, I made a careful drawing of both discs, and used it as a means of comparison at each ophthalmoscopic examination.

CASE 4.—April, 1867. Sarah H——, aged thirty-nine years, has been under observation for the past two years. She gives the following brief history. She has been delicate since puberty, having frequently suffered from bronchitis and dyspepsia. Her grandmother lost the use of one side shortly before her death, but no other member of her family suffered from paralysis. Four years ago she had two slight attacks of hemiplegia, which affected the left hand and leg. Sight was totally lost immediately after the fits, and returned only at the expiration of four months, when she could see the fire blaze. Since that time vision has gradually improved.

Present condition.—Vision of right eye: reads 4 Jaeger. Vision of left eye: counts fingers.

Optic discs.—Both discs are pearly white. Vessels small, but not tortuous.

CASE 5.—April, 1867. Wm. C——, aged thirty years, suffers from atrophied discs. He makes the following statement:—"Nine years ago I suffered from rheumatic fever, and was very delirious during part of the time I lay in bed. Two years after the fever I became both deaf and blind, but sight had been gradually failing ever since the fever. I have been under Mr. Pridgin Teale's care for a long time. Four years ago I can positively say I was quite blind."

Present condition.—Vision: with each eye reads 16 Jaeger. Both discs brilliantly white.

Oct. 22nd.—Since last seeing the patient he has been spending some time at Harrogate and Ilkley. The improvement in his vision has been very marked, and he attributes it to his improving health. Vision: reads with difficulty No. 4 Jaeger. Discs unaltered in appearance.

Park-square, Leeds, July, 1868.

DISLOCATION OF THE METACARPUS.

BY THOMAS F. RAVEN, L.R.C.P.,
HOUSE-SURGEON TO THE KENT AND CANTERBURY HOSPITAL.

DISLOCATION of the metacarpus, owing to the great strength of the ligaments binding it to the carpus, and the very limited movement permitted in the carpo-metacarpal and inter-metacarpal joints, is of rare occurrence, even when produced by severe laceration and crushing of the hand. The dislocation is said to be invariably compound. Simple dislocation of the metacarpal bone of the thumb is occasionally met with, but such a laxation cannot be considered analogous to that of the other bones of the series, because, granting that it is a metacarpal bone, the first, in its articulation with the carpus, its functions and mobility, differs widely from the remaining four, which are not only less movable at their junction with the carpus, but are also firmly bound to each other. I have recently met with a case of simple dislocation backwards of the second, third, and fourth metacarpal bones of the left hand, which I think deserves to be recorded.

Thomas L——, aged seventy-seven, was kicked by a horse on the back of the left hand, and was brought to the Kent and Canterbury Hospital, on March 21st, soon after the accident had happened. Upon examining the hand, I found a prominent ridge, consisting of the carpal extremities of the second, third, and fourth metacarpal bones, projecting on the back of the hand, over which the integument was but slightly stretched. The metacarpo-phalangeal joints on the dorsal aspect of the hand presented a concavity instead of a convexity, owing to the tilting up of the carpal ends of the displaced bones. Upon placing the hands in the attitude of supplication—i.e., with the tips of the thumbs and little fingers coinciding,—there was

found to be shortening to the extent of a quarter of an inch of the left index, middle, and ring fingers. As there was no swelling of the hand, the outline of each dislocated bone was traced along the shaft; and the expanding carpal extremity could be clearly defined. The ligaments connecting the bones laterally could be felt, and appeared to be untorn. There was no visible deformity in the palm, and the plane of the fingers was not altered.

As very little pain was felt, and there was not much tension of the skin, the dislocation was left unreduced for an hour for the purpose of obtaining corroborative testimony as to the nature of the case. The only doubt entertained was whether the heads of the bones had not been broken off, and the shafts subsequently displaced, as in a Collis' fracture. But upon careful re-examination of the hand it appeared that this could not be the nature of the injury, as the carpal ends of the bones, with the even edges of their articulating processes, could be traced beneath the skin. The dislocated bones were also measured, and found to correspond in length to those of the right hand: there was no mobility to be obtained between them, or crepitus upon attempting to move them.

The dislocation was not reduced without some little trouble, owing partially to the difficulty of grasping and making extension from the carpus. The reduction was accomplished by a rotatory movement of the metacarpus after extension had been employed. The three bones slipped back as one, but without an audible snap, and no crepitus was felt.

With regard to the cause of the luxation, as there were no external marks of violence, except slight grazing of the knuckles, I supposed that having been knocked down by a kick in the chest, which he also sustained, the patient might have fallen upon the hand. He is, however, positive as to the fact of his having been kicked on the back of the hand. He admits he fell, but states that it was upon the right side, and that the left hand did not come into contact with the ground.

One or two points in connexion with the case are worthy of notice. It is remarkable that the three least movable and most firmly articulated bones of the metacarpus should have been thus displaced; and that in so old a subject the brittle bones should have better resisted force than the tough and rigid ligaments. Sir Astley Cooper states, in his work on Dislocations, that he had never seen a case of dislocation of the metacarpus, except in connexion with gun-shot wounds and other severe injuries of the hand. In R. W. Smith's treatise on Dislocations, that of the metacarpus is not mentioned. Mr. Erichsen says that no metacarpal bone, with exception of the first, admits of dislocation. On referring to the catalogue of the museum at the College of Surgeons, I find that there is there a specimen of partial dislocation of the fourth metacarpal bone backwards. It seems to have lost its connexion with the os unciforme only, being still articulated to the os magnum. I have consulted many other authorities with the view of obtaining further information about this particular dislocation; but as I have been unable to find a single record of such a case as the one which I have described, it is, as far as I know, unique.

July, 1868.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se compararo.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

WOUND OF THE POPLITEAL ARTERY FROM SIMPLE FRACTURE OF THE FEMUR; AMPUTATION; DEATH.

(Under the care of Mr. CHRISTOPHER HEATH.)

THERE would seem to be a general concurrence of surgical opinion as to the best mode of treatment in such a case as the following—a result due, in great part probably, to Mr. Poland's important paper which was published in the "Guy's Hospital Reports" three years ago.

For the notes of the case we have to thank Mr. Cluff, the house-surgeon.

The patient, a man aged forty-six, was admitted into the hospital on the 4th of August, 1868, with the following history:—Three weeks before the date of his admission, according to his own statement, he was putting on his right boot, and while pulling forcibly at it in order to get it on his foot he felt something give way above the knee. (His right leg had been paralysed a year before—from what cause could not well be ascertained; but he gradually recovered under medical treatment, and, at the time of the accident, had nearly regained the use of the limb.) He was seen almost immediately by a surgeon, who detected a fracture of the femur in its lowest third, and put up the limb at once on the long splint. He suffered a good deal of pain at the time; but still managed to bear the splint for three weeks, during which time it was left undisturbed. On the 3rd of August the pain, which had been growing gradually worse, became wholly intolerable, and the long splint was removed. Next day he was sent to the hospital.

On admission he presented a very blanched appearance; lips, tongue, and eyelids extremely pallid; pulse rapid and feeble. The right leg was enormously swollen throughout, and he complained of intense pain in it—most severe about the knee, but radiating thence up and down the limb. The right knee was unduly prominent, and above it a distinct depression was to be felt. The skin in front and on the inner side of the knee was somewhat reddened. On manipulating the limb, great subcutaneous œdema was found everywhere. On the inner side of the knee deep fluctuation could be doubtfully felt; but he did not complain of *especial* pain on pressure being made in this or any other situation. The right limb felt hotter throughout than the left; and pulsation was distinct in both tibials on the right side. He could move the toes of the injured limb perfectly well. He stated that he had sweated profusely during the previous week, but he had not had any rigors.

The patient was seen by Mr. Heath on the evening of his admission. With the view of ascertaining the character of the fluid which gave the deep fluctuation on the inner side of the knee, Mr. Heath made an exploratory puncture. Nothing came from the puncture but a little blood. The puncture was closed with plaster, a large poultice was applied over the knee, and the ammonia-and-bark mixture and alcoholic stimulants were freely administered.

He passed a restless night, and was seen on the following day by Mr. Erichsen and Mr. Heath in consultation. It was agreed that fluid of some kind lay deeply in the vicinity of the fracture, and with a view to further examination the patient was brought into the operating theatre, and put under chloroform. Mr. Heath then made an incision to the outside of the puncture of the previous evening, so as to admit the forefinger, which, when introduced, readily felt the fractured ends of the bone, and detected around them a large cavity filled mainly with clotted blood. Immediate amputation was resolved on, and the operation was performed by Mr. Heath below the middle of the thigh by a long anterior and a short posterior flap, the sharp end of the fractured bone being removed with the saw.

On examining the amputated limb, a large mass of clotted blood was found lying close to the bone and surrounding the fractured ends. It reached from the middle of the thigh to the bottom of the popliteal space; and at the lower part was a mass of fibrin arranged in lamellæ, which presented at the first view the appearance of an aneurismal sac. No communication was apparent, at first sight, between the mass of effused blood and the popliteal vessels, to which the fibrinous lamellæ just mentioned were closely adherent; but the azygos artery was found torn from the popliteal trunk, the torn end lying in the middle of the effused blood. The little vessel was quite impervious; on cutting it out, it was found impossible to pass a probe through it. On cautiously separating the laminated fibrin from the popliteal vessels, a hole in the artery, passing obliquely through its coats, and large enough to admit a No. 3 catheter, was disclosed. This hole was about opposite the point at which the azygos artery ought to have arisen. The vein was uninjured. The fracture of the bone ran very obliquely from about five inches above the knee to the inner condyle; and the ends of the fragments (especially the lower end of the upper one, which lay in close proximity to the wound in the popliteal vessel) were sharply pointed. There was no evident disease of the bone; it was of normal hardness, and of normal appearance in every way.

The man never fairly rallied from the operation. He suffered from incessant vomiting for thirty-six hours, which obstinately resisted all treatment. He finally sank on the third day.

WESTMINSTER HOSPITAL.

IMPENDING SUFFOCATION FROM DRINKING BOILING LIQUID; LARYNGO-TRACHEOTOMY; RECOVERY.

(Under the care of Mr. FRANCIS MASON.)

THE operation which was performed in this case is one which there is no doubt has often been done unintentionally in the surgeon's endeavour to open the trachea. In the present instance the cricoid cartilage was purposely divided, with the object mentioned by Mr. Mason in his remarks.

A child aged two years was brought to this hospital at 1 P.M. on the 26th of June, 1868, suffering from great difficulty in breathing. His mother said that at 8 A.M. on the day of admission he drank from the spout of a teapot which she had just filled with boiling water. When seen by Mr. Mason, the child had the most distressing dyspnœa, which was becoming more urgent at each inspiration. With the concurrence of his colleague Mr. Brooke, Mr. Mason opened the trachea high up, and cut through the cricoid cartilage. When the tube was introduced, which was readily accomplished, the patient was instantly relieved. In the after-treatment, the tube was taken out at intervals, in order to ascertain if the child could breathe without it; but it was not until the twelfth day that the tube could be wholly dispensed with. The wound in the throat healed rapidly, and the child left the hospital perfectly well on July 24th.

In his clinical observations on this case, Mr. Mason spoke of the carelessness on the part of parents in allowing their children to drink from a teapot or from a kettle—both common occurrences amongst the poorer classes. He said he had purposely opened the windpipe high up. The operation, which was undertaken with the view of affording immediate relief, was simple, and was rapidly completed. He might have performed laryngotomy, and, had he done so, would have made a transverse incision in preference to the vertical one. He, however, thought it prudent in this instance, on account of the extreme youth of the patient, to perform laryngo-tracheotomy. Thus a larger tube could be inserted, which enabled the child to breathe with greater freedom, and there was less chance of its being obstructed by mucus. Mr. Mason ventured to think that many of the difficulties experienced in the operation of tracheotomy arose from the windpipe being opened too low down.

LONDON HOSPITAL.

AMPUTATION OF THE UVULA.

(By Mr. C. F. MAUNDER.)

WITH a view to prevent, in great measure, the painful sensations arising from the passage of a bolus of food across the raw stump of a previously elongated uvula, Mr. Maunder proposes to amputate this organ by the double flap method. These fall together, and their cut surfaces being in contact, no raw surface is exposed to irritation. He recently adopted this plan with a highly satisfactory result, introducing a small suture to maintain coaptation of the flaps.

Clinical Records
OF
THE PARIS HOSPITALS.

HÔPITAL NECKER.

FOUR CASES TENDING TO ILLUSTRATE THE ABSORBING POWER OF THE BLADDER.

(Under the care of Dr. GUYON.)

THE following cases will be found of interest as assisting to elucidate an obscure point of physiological therapeutics which has given rise to much difference of opinion. Not further back than in our number for June 20th, Sir Henry Thompson, in his lecture on Cystitis and Prostatitis, mentions that injections of anodynes into the bladder are of hardly any value, and that the quantity injected matters little, because the mucous membrane of the bladder appears to have no absorbing power; whilst in a preceding number (Oct. 19th, 1867), Dr. Braxton Hicks, in a lecture on a similar subject, states that he has derived the best results from the employment of injections of morphia. The following clinical observations, and particularly the fourth, would appear to support the latter opinion. We are indebted for both the details of the cases and the remarks which precede and accompany them to Mr. Edward Alling, Dr. Guyon's talented house-surgeon.

There exists a wide difference of opinion between medical men with regard to the absorbing power of the mucous membrane of the bladder. In the number of the *Gazette des Hôpitaux de Paris* for March 7th, 1868, may be read a summary of the results of the more recent French researches upon this subject. These results are highly contradictory. Thus the Messrs. Ségalas, whose experiments were performed upon various animals, fully admit this absorbing power of the bladder. M. Demarquay, whose researches were confined to the morbid human bladder, considers this organ as barely capable of absorbing medicinal substances. MM. Kuss and Susini, on the other hand, absolutely refuse to admit this property. It may be well to say that these experiments were confined to the healthy bladder in man. The practical results derived from the observation of the four following cases would tend to prove that if the absorbing power of the bladder is not great, it does really exist as well in the healthy as in the morbid condition of the organ. The effects of injections with chlorhydrate of morphia were carefully studied as to the light which they might reflect on this point. The injections were made by means of Pravaz's large syringe, and of a small elastic probe *à bout olivaire*, which enables the operator to keep a correct account of the quantity of fluid introduced. Each drop of the solution contained two milligrammes of chlorhydrate of morphia.

CASE 1.—N——, aged forty-five, was admitted into the hospital on Feb. 16th. She had been suffering from cystitis for the last five months, and for six weeks has been unable to maintain the recumbent position for any length of time. She gets little sleep, and consequently has lost flesh, while her features bear the expression of pain. An injection of thirty drops of chlohydrate of morphia (sixty milligrammes) into the bladder, which was first evacuated. No relief.

Feb. 17th.—Same quantity injected. Slight relief.

18th.—No injection was given in the morning, and the patient complained she suffered more than previously in the afternoon. At five P.M., sixty milligrammes of the same solution were injected. This gave notable relief till near midnight. During the night she passed urine only ten times, whereas before being admitted into the hospital she used to discharge urine forty and fifty times in one night.

21st.—Half an hour after the administration of an injection of thirty drops (same solution) symptoms of narcotism manifested themselves—congestion of the face, drowsiness, incoherent talk. Her neighbours in the ward said that she looked like a "drunken woman." No vomiting. This condition lasted till three o'clock. The same evening thirty drops were again injected, but with no fresh symptoms of narcotism.

22nd.—Thirty drops injected in the morning, but the evening injection was withheld. The next morning she complained of this, saying that she had had no sleep the whole night, and had suffered intense pain.

23rd.—Three injections of thirty drops each were administered, with considerable relief to the patient. From this time to the 30th of April the injections were continued, with the same favourable results as above mentioned; but the disease was then complicated by inflammation of the right kidney, and the treatment was suspended.

CASE 2.—M——, aged thirty-one, was admitted into the hospital on Feb. 19th. Has been suffering from cystitis for ten months. Thirty drops of the solution were first injected, and the very next day there was much relief.

Feb. 22nd.—Injection of twenty-five drops twice in the day.

23rd (fourth day after admission).—The patient asserted that for six months he has never experienced the relief which he now feels after the injections of morphia.

25th.—Injections suspended.

26th.—The patient said he had suffered considerable pain during the night. The injections were resumed; and the introduction of thirty drops of the solution into the bladder gave immediate relief.

From Feb. 28th to March 4th twenty drops only were injected every morning, with no increase of pain.

March 4th.—The patient suffered somewhat more; but, instead of increasing the quantity of morphia, an injection was administered with sixteen drops of a solution of bromide of potassium. These injections were continued till March 8th without abating the pain, whilst they were followed by much burning.

All local treatment was suspended until March 26th, during which time the pains, though persistent, were more or less intense. At the end of this period, however, they increased considerably; when, on an injection of thirty drops of the solution being administered, the patient experienced notable relief. The injections were then continued till the 12th of April, at which time symptoms of inflammation of the left kidney became manifest.

Case 3.—A——, aged thirty-five, was admitted into the wards on March 14th. Cystitis of one month's duration. Fifty drops of the solution were immediately injected; and on the very next day there was considerable abatement of the pain. Next, sixty drops were given on two separate occasions, with the same good effects.

On the 21st (seven days after the patient's admission) it was stated that he passed water only four or five times during the night; whilst before his admission he was obliged to discharge urine every five minutes.

24th.—Thirty drops only were administered for the whole day. The next day the patient said he had suffered much more than he did generally. It was decided that the same dose should be tried for a few days; but the pain became so intense that the full dose of thirty drops, twice a day, was recurred to with immediate relief to the patient.

Case 4.—A——, aged seventeen, was admitted into the hospital on March 7th, with neuralgia of the left ovary. The disease had manifested itself at the age of fifteen, simultaneously with menstruation, and had persisted since then, increasing in intensity at every menstrual period. The patient on every such occasion was compelled to lie in bed. She presented no symptom of disease in connexion with the bladder. On the very day she was admitted subcutaneous injections with chlorhydrate of morphia were resorted to. The sensitiveness to the remedy was so great that though only half a centigramme was administered, it brought on vomiting. By degrees, however, it became possible to inject half a centigramme twice in one day. The pain abated considerably. On the 12th the menstrual discharge appeared, and was attended by much less suffering than usual.

On the 17th, M. Guyon bethought him of trying injections of morphia into the bladder. Twenty milligrammes were administered twice the same day. This was attended by no accident; and the relief which had been obtained by means of the subcutaneous injections persisted.

22nd.—As the solution of morphia, composed of two milligrammes to a drop, was wanting, Mr. Alling thought he would give a subcutaneous injection with half a centigramme of morphia, in order to afford some relief to the patient. The next morning she, of her own accord, stated that she had decidedly not derived the same relief from the subcutaneous injection as from the preceding injection into the bladder. The vesical injections were therefore resumed. Twelve drops morning and evening were administered; and the patient declared that she felt great relief as soon as the first injection had been given.

From the 24th to the 31st of March there was no occurrence worthy of being noted; but on the 1st of April, after the administration of the usual injection in the morning, the patient felt symptoms of intoxication, which she spontaneously summed up thus: heaviness of the head; drowsiness; congestion of the face. This condition lasted for from five to six hours. It must be stated that on the eve she had taken forty-five drops of morphia; while her peculiar sensitiveness to the remedy above mentioned must be borne in mind.

April 2nd.—The injections were discontinued, and bromide of potassium was tried in their stead, but with no good result. The patient's sufferings increased immediately; and in order to continue the treatment it became necessary to employ, simultaneously, subcutaneous injections with morphia.

"I have not space enough," concludes Mr. Alling, "to discuss these details as I would like; but I shall endeavour to sum them up briefly. In the first place, the efficacy of injections into the bladder seems evident. We see in Case 1 that the pain speedily abated, that the desire to pass urine was diminished in a remarkable degree, and that sleep was restored to the patient. In Case 2 relief was most speedy, since on the fourth day the patient declared that he had never felt such comfort for the last six months. In Case 3 the patient soon experienced relief. Sleep was restored to him; for whereas he had been obliged previously to pass urine every five minutes, he was so much better that he discharged urine only four or five times a night. I have had occasion in other cases to state a like amendment of the same symptom. But it is mostly with our fourth case that there would be need to insist upon the particulars. Here the bladder was healthy, and M. Susini's experiments seem conclusive in favour of non-absorption in such cases. How then are we to explain the persistent relief derived from the employment of the injections, and the increase of pain, as soon as these were stopped? With regard to the occasion when symptoms of intoxication were experienced, it may be objected that there was some slight breach of the mucous membrane. Obviously I cannot prove that this was not the case, though I am quite confident it was not. Before concluding, I must note the fact that, in this last case, each injection was followed by a sensation of burning, which was sometimes very intense, and lasted for from five to ten minutes. I know not, however, what part this symptom may play in the act of absorption, which seems evident to me in this case."

Reviews and Notices of Books.

The Surgical Treatment of the Diseases of Infancy and Childhood. By T. Holmes, M.A. Cantab., Surgeon to the Hospital for Sick Children, Surgeon and Lecturer on Surgery to St. George's Hospital, &c. pp. 648. London: Longmans and Co. 1868.

In this handsome volume the author has laboured very successfully to bring together all the current literature bearing upon the diseases of childhood surgically considered, and has illustrated his subject by his own experience acquired during nine years' surgeoncy to the Children's Hospital. The range of subjects is necessarily a wide one, but we will endeavour to indicate briefly the principal points which Mr. Holmes has illustrated. Commencing with Malformations, the several forms of congenital deformities are discussed in thirteen chapters, occupying 221 pages. Congenital tumours, cysts, nævus, malformations of the skull, spina bifida, hare-lip, extroversion of the bladder, imperforate anus, &c., are here all considered; but the author purposely omits club-foot and allied deformities, which are treated of in orthopædic works. The chapter on hare-lip is very elaborate, comprising as it does most of those modifications of the ordinary operation which have been published from time to time, but which we believe are seldom employed. The question of operating on cleft palate at an early age, as carried out by Bilroth and Mr. T. Smith, is discussed; but the author does not bring forward any experience of his own upon the subject. In treating of operations for extroversion of the bladder, Mr. Holmes describes those performed by Lloyd, Athol Johnson, and himself; but we are surprised to find no allusion to Mr. John Wood's cases, which have been numerous and successful, one being, we believe, in a female child. Mr. Holmes gives a good *résumé* of the literature of imperforate rectum; and we quite coincide with his direction to dissect in the perineum for the missing bowel, rather than to thrust a trocar and canula vaguely in search of it.

The second part of the work is occupied by a consideration of the injuries to which childhood is specially liable; the separation of the epiphyses of long bones naturally receives attention, and Mr. Holmes does not appear to accept fully Prof. R. W. Smith's views with regard to this accident as affecting the lower end of the humerus. In the chapter on burns we were surprised to find no mention of the intense shock which children sustain, and of the necessity for directing attention to this rather than to the local mischief. The maintenance of the vitality of the patient for the first few hours by warmth and stimulants is of far greater importance than the dressing of the wound. The author speaks of the advantage of pressure by strapping in the treatment of the exuberant granulations of burns, but does not seem to be aware of the great

benefit the careful application of strapping to cicatrices already formed may confer. The observations on tracheotomy, in the chapter relating to injuries of, and foreign bodies in, the windpipe, are valuable and to the point. Attention may be specially drawn to the sketches of the glottis at different ages at p. 325.

The third part discusses the surgical diseases of childhood; and the author, as might be anticipated from his previous writings, dilates especially on the diseases of the bones and joints. The question of excision or amputation is fairly argued; and Mr. Holmes, while upholding the former operation in appropriate cases, shows that in some instances even of hip-disease amputation gives a more favourable result. We may mention, as a surgical curiosity, that a case of excision of *both* elbows is recorded by the author. Diseases of the intestinal and genito-urinary tracts are next discussed. Mr. Holmes, like most surgeons, prefers lateral lithotomy for children, unless, indeed, the calculus is so minute as to be crushed and brought away at one sitting. An engraving is given at p. 601 which, having been drawn on the wood by an amateur, represents the *right* instead of the *left* side of the pelvis with the parts concerned in lateral lithotomy. The sketch is, no doubt, accurate enough; but it is stated at three different places that it represents the parts of "the precise size of nature in a boy aged eight." This must be an error of expression; for, though relative proportion has no doubt been preserved, the drawing is considerably reduced in size. Mr. Holmes's artist has not used him well in other instances: thus, at p. 114, the same non-reversal of the drawing on the wood has necessitated a modification of the description of M. Giraldès' operation; and at p. 617 is a drawing of an infantile hydrocele which is utterly unintelligible. In addition to the woodcuts, however, there are nine plates of chromo-lithograph which illustrate very well the subjects to which they apply.

Taken altogether, the volume is a valuable contribution to the literature of the subject on which it treats, and gives evidence of much research and accurate observation on the part of its author.

Principles of Forensic Medicine. By WILLIAM A. GUY, M.B. Cantab., F.R.S., F.R.C.P.; Professor of Forensic Medicine, King's College, London; Physician to King's College Hospital, &c. Third Edition, Revised, Enlarged, and copiously Illustrated by Wood Engravings. London: Renshaw. 1868.

WE need not say much in regard to this well-known book. Its general reputation is evidenced in the appearance of a third edition; and its successive editions have this great excellence, that they are always up to the time in those fine points of chemistry and physiology which have such important bearings on forensic medicine. This merit is very noticeable in the chapters on Mental Disease and the Detection of Poisons. Dr. Guy has the credit of having suggested a method for procuring sublimates of the more important mineral poisons, especially arsenic and mercury, on a flat surface of glass, so as to admit of ready examination by the microscope. This edition has quite a scientific value, as containing a good, if not the first, statement of the discovery of Helwig, of Mayence, that the method of sublimation on flat surfaces admits of extension to the alkaloids—a fact which greatly enlarges the power of chemistry in the detection of some most important active principles, as strychnine, morphine, and cantharidine. It is important to record Dr. Guy's opinion on the question of the detection of strychnia:—

"Strychnia has now been detected in the contents of the alimentary canal, in the muscles and viscera, and in the blood and urine. Messrs. Rodgers and Girdwood, also, state that they detected it in the bones. There is no longer any room for doubt that strychnia, like arsenic, antimony, and mercury, undergoes no change in the alimentary canal, in the vessels of the body, or in the secreting organs; but that it can be detected in organic fluids and tissues by a proper method of analysis carefully and skilfully conducted."

In leaving this book, which combines the conciseness of a handbook with the authority of an original treatise, we should say a word of great praise in behalf of the engravings in this edition. They are very numerous and very admirable.

REPORT
OF
The Lancet Sanitary Commission
ON
THE STATE OF THE TOWN OF GUILDFORD.

Situation.—The town of Guildford is situated on the side of a chalk hill, at a point where it is intersected by the river Wey. The larger portion of the houses are built directly on the chalk, but on the northern side a shallow layer of overlying marly sand and gravel is interposed.

Drainage.—Of this there is, scientifically speaking, none, if we except a partial system of surface drains, which discharges only a very small proportion of slops and sewage into the river Wey. In the words of Dr. Buchanan, "the chalk furnishes a perfect natural drainage," and this statement is quoted by the local authorities apparently in justification of the existing arrangements. Cesspools are made in the rear of nearly every house, and into these the sewage is discharged. The liquid parts pass off rapidly through the porous chalk, whilst the solids accumulate, and are for the most part removed at intervals of years. These cesspools are therefore extremely numerous. In the denser portions of the town they occur at intervals of a few yards only; and they are so close to the wells that a direct communication has occasionally been made. We saw one well five yards only from the nearest cesspool, and there were five or six within a radius of fifty yards; and another, in a yard upon the Mount, was sixteen yards from a cesspool which received the sewage of five privies, two piggeries, and seven houses. In this yard there was also a superficial drain, the grating of which is only eighteen inches from the margin of the open well from which the supply of water is derived. It was stated by the inhabitants that this grating is easily choked up, and that the liquid then runs directly into the well. It is therefore certain that the wells of Guildford are exposed to the danger of sewage contamination, and that the larger the supply of water the more likely is this to occur.

There is distinct evidence that very many of the cesspools have never required cleansing even for fifty years, although the sewage of large families has been regularly discharged into them. Ordinarily, they require the removal of accumulated solid matter every three or four years; but now and then, when persons have opened their cesspools with the expectation of finding them choke-full, they have been astonished to discover them dry and almost empty. This occurred in High-street. A cesspool into which the drain of a watercloset used habitually by a large family was turned, and which also has received the slops of the house for more than forty years, was opened with the view of cleansing it. It was only eight feet square, and was found to contain so small a quantity of solid matter (only some inches) that it was closed up without further exploration. This fact appeared so important that no pains were spared to ascertain its truth. It proves that there are in some situations channels or faults in the chalk through which even solid matters may be conveyed. In the case before us, either the solid matters have so passed off, or, as would seem more probable, the cesspool communicates with the system of springs by means of such a fault or channel, and it is flushed out from time to time in wet weather, when the water is extremely high.

But this is not all. Since the introduction of the public

waterworks, a practice has grown up of using the old wells as cesspools. The common spring from which it is probable that the whole water-supply of the town is derived is thus fouled by a quantity of sewage matter, which, if now so small in comparison with the total flow of water as not to be recognised by any direct test, may in a few years come to be of the most serious consequence. We are compelled to arrive at the conclusion that, in the words of the Privy Council communication, the drainage is in a condition fraught with serious danger to the public health.

Supply of Water.—Of 1675 houses (1867) 747 obtained their water from common wells; the rest were supplied from a most powerful spring situated on the bank of the river Wey, with which, however, it has no connexion as to source. The wells in the town are affected by the height of the water in the river. A difference of about nine or ten inches at the tail of the water-wheel, which drives the pumps of the water-works, immediately affects the springs of a large number of wells in the southern and middle portions of the town. Even as far as High-street we proved a well empty, because at the moment the water in the river was unusually low. Although the volume of water discharged from the public well is immense, reaching, on some occasions 12,000 gallons per hour, with scarcely altered flow, it is not entirely unaffected by the same cause. At the period of our visit workmen were engaged in stopping the immense flow from the springs at the bottom of the river, with the object of increasing the supply in the public well; and it is found much more difficult to alter the level of the water when the river is full. It would appear certain that there is at this point an immense subterranean watercourse in the chalk, from which the wells are fed, and that the level of the water therein so nearly coincides with that of the river that the force of the outflow and the level of the spring itself are affected thereby. So much for the source, which is inexhaustible, and so far as chemical examination has hitherto gone, without reflection on its purity. The enormous outflow, and the antiseptic and filtering properties of chalk, tend to mask and diminish the effect of sewage contamination, if such there be; and we are of opinion that the quality of the water now supplied is as wholesome as that of any other town. But Cæsar's wife should be above suspicion, and we would strongly advise that a supply should be sought for from a deeper source. It is probable that the green sand underneath the chalk would yield all that is desired. But we have already seen that only a portion of the inhabitants use the public water, and it is obvious that there is far more danger in the wells. We would recommend that the local authorities should insist upon their closure, and that the plan of using them as cesspools should at once be stopped.

Closets.—There are throughout the town an amazing number of privies, many of them with special cesspools, and many more communicating with one common to several houses by means of drains. The authorities have ordered these privies to be supplied with trapped pans, but as they have not insisted upon a supply of water, the pans are for the most part useless. We inspected a score or two which were in a very filthy state. In a yard containing five, one only was in decent order. In this case every drop of water had to be drawn from a well forty or fifty feet deep by a bucket, chain, and windlass; and when the necessities of the house are supplied, it is not very probable that the operation would be repeated to cleanse the soil-pan of the privy. Even when there is a supply from the waterworks, not far off, the trouble is too great to fetch it. No amount of inspection will remedy this evil. Moreover, these privies are very rarely ventilated, they are often situated close to the doors of the cottages, and in more than one instance the inhabitants were obliged to vacate their rooms on account of the stench emitted when there is rain or change of weather. So numerous are they that we counted fourteen in a space of less than sixty yards square; and in one house the wall was damp from the fact of there being a privy on the other side. Waterclosets appear to be common in the better houses, combined with privies and the cesspool system.

Houses.—We were forcibly impressed with the unhealthy character of the house accommodation. It would seem that there are an immense number of small freeholds, and that every proprietor has built houses round the circumference of his property, an arrangement which prevents the possibility of having windows on both sides. Leading from the main street are yards, with houses built on each side in this fashion; and upon inquiry the inhabitants complained of the impossibility of ventilation. We inspected a house inhabited by a man, his wife, and five children, all of whom had suffered from scarlatina, and were amongst the earliest attacked. It consists of a day-room, nine feet square, but only six feet high; and the bedroom over is of the same size. There is a small back kitchen, in one corner of which is a privy communicating with a cesspool near. *It is nailed up to diminish the stench.*

Overcrowding.—It is chiefly amongst the labouring classes that there is overcrowding, and amongst them it undoubtedly exists to a very considerable extent.

The state of the river.—It is our duty to apologise for having adopted the statement of the *West Surrey Times*, that the river receives the sewage of 10,000 people, and is so black and muddy that you cannot see an inch below the surface. The first statement was contradicted in the same paragraph, and the second must be emphatically contradicted now. The river, however, is neither bright nor pure. Above the town it receives, as Mr. Eager states, "the refuse of four paper-mills, four tan-yards, one leather-mill, and probably minor sources of contamination." Its waters are to a small degree discoloured, and unfit for drinking purposes. There is absolutely no smell, and, as the current is considerable, little or no impurity accumulates. But below the water-mills and lock the case is somewhat different. In going down the river we counted twenty-five drains, discharging more or less of water from the town, and considerably more than less of very foul material. At the point of discharge mud accumulates, but not to any great amount, because of the scour of water. The boatman informed us that the stench had occasionally been very bad in the hot weather; but he complained chiefly of the large number of dead animals which were allowed to rot upon its surface and banks. The state of the river is, in the words of Mr. Taylor, "undeniably bad," but not such as to seriously affect the health of the town.

General mortality.—We give the following statistics of mortality on the sole authority of Mr. Eager, not having had the opportunity of verifying them. He says that the registrar, assisted by a very reliable person, has gone through the registration books for the purpose of separating the deaths in the borough from those in the suburban parts of the registration district, and corrected the result for the increase of population. The death-rate per 1000 living during 1863 was 19·71; 1864, 22·19; 1865, 19·95; 1866, 18·36; 1867, 18.05. Mr. Eager adds a significant postscript to say that the deaths in the current year, including those from scarlet fever, are of average amount, and as he had previously informed us that the deaths in the whole registration district were in each year considerably higher than the above proportion, it seems strange that the extra mortality should have occurred in the suburban parts, and not in the comparatively overcrowded and unhealthy town. The statement is, however, of little value as compared with the facts actually before us.

The Present Epidemic.—It was stated in our quotation from the *West Surrey Times* that "there have been nearly, if not quite, 300 cases of scarlet fever, and 14 or 15 deaths." This is, however, far below the truth. Exact inquiries show that since the 1st June not less than 406 cases have been attended by the various medical men, besides a large number of persons, for the most part inhabitants of infected houses, labouring under sorethroat without eruption. The number of deaths registered between the 11th June and the 15th August is 22. There are

also other evidences of an unhealthy state of things. Diarrhœa has been unusually prevalent, and several cases of English cholera, with genuine rice-water evacuations, have occurred. There have also been seven or eight cases of diphtheria, and one death. With respect to the history of the disorder, it would appear that there have been sporadic cases in Guildford and the neighbouring villages throughout the spring. There was no evidence of anything of the kind at the period of Dr. Buchanan's visit; but in October two children were attacked in a gardener's family in which some second-hand clothes had been unpicked. Another serious case occurred in November, and several in January and February following. But there was no case amongst the pauper patients until the last week in May; and it was in the middle of June that the disease really began to spread with alarming rapidity. From that time there was a marked increase both in the number of persons attacked and in the severity of the disease; but it is satisfactory to know that there has been some improvement within the last few days, affording a reasonable hope that the acme of the epidemic has been passed.

Such being the facts, we have now to note the explanations which have been given. Mr. Eager states that scarlatina poison, having its genesis in infected bodies, is independent of local and atmospheric agencies; and that, in consequence of there having been no epidemic scarlet fever in Guildford for twelve or fourteen years, a large number of the younger population were liable to be attacked. We are authorised by Mr. Eager to state that he is in error as to the fact on which his theory is based. Guildford has probably been subject to two other serious epidemics within the last five years. But they escaped Mr. Eager's notice, because on those occasions the disease was confined principally to the poorer classes, with whom, except in the workhouse, he rarely comes in contact. The fact is proved by the register of deaths from the disease, which were in 1863, 1; 1864, 12; 1865, 10; 1866, 2, and 1867, 1. Moreover, one medical man—Mr. Butler—attended half as many cases in 1864 as he has done this year, and was himself confined to bed with the disease; whilst Mr. H. Taylor remembers that he had a very large number of cases, a remarkable proportion of which were affected by secondary dropsy. Mr. Taylor, on high authority, attributes the propagation of the disease to its infectious quality, often irrespective of all external sanitary conditions. He thinks that the force of the poison itself is likely to have been increased by the unusual heat, with which the epidemic coincided with respect to time. How otherwise, says he, are we to explain its greater prevalence and mortality amongst the higher and middle classes? This disproportion he assumes to have been abundantly shown in the present epidemic. But he brings no definite facts in proof, and it is necessary to see how far his theory is borne out. With respect to the pauper class the facts are easily obtained. According to the returns of the Poor-law Board just published, we find the number of paupers to be about 5 per cent of the population—say 500; add to these the 250 inmates in the workhouse, and as many more for persons who might reasonably be entitled to parochial medical relief under the pressure of disease: in all 1000 individuals. Some deduction should be made for the number of aged and infirm persons who are not susceptible, but we will throw them in. The parish medical officers have attended 55 cases, or about 1 in 18 of the pauper class; 351 cases remain for the rest of the community, numbering at least 10,000 souls, which is 1 in 29. It is therefore evident that the paupers have suffered most severely. But the bulk of the population consists of workmen, who are perfectly independent of the parish, but, in order to be so, are compelled to live in unhealthy cottages, and to submit to the overcrowding of which we have complained. This class has undoubtedly suffered most, and next to them the petty tradesmen and artisans, who are but a step above them. Mr. Schollick, whose practice is principally confined to these classes, has himself attended 124 cases, or more than double the number attended by any of his *confrères;* and we were enabled to trace evidences of the same fact in the practices of other medical men whose service are not exclusively devoted to the rich and well-to-do. It cannot, however, be denied that the rich have suffered in an unusual degree, but this is capable of explanation by the fact that they did not suffer in the former epidemics, and that the epidemic constitution (to use an ancient term) is much more powerful and more generally diffused this year than it has ever been before.

Mr. Taylor states that the deaths that have occurred in the houses of the gentry and tradesmen form a large proportion of the whole number of deaths, and that in some houses where sanitary arrangements are the best, "the cases have been the most severe and rapidly fatal." But here again facts appear to be against him. Six of the deaths are registered by Mr. Schollick, all of which, except that of his own son, whose seizure is accounted for, occurred amongst the less wealthy classes. Three out of four fatal cases attended by Mr. Sells were in the families of a little publican, a groom, and a labouring man. Several certified by Mr. Taylor belong to a class which can scarcely be described as gentry or tradesmen, and although unquestionably some of the worst cases have occurred as he describes, the proportion is not greater than we might reasonably expect. It must be borne in mind that the immediate mortality of scarlatina is always more marked amongst the well-fed classes. In such the disease is developed with extraordinary force, and pursues a more acute course. Nearly all the adult fatal cases amongst the upper classes have terminated in a few hours. That an inspector of police or healthy serving maid should be well and dead in forty-eight or sixty hours creates a great sensation and considerable alarm. But this must not divert our attention from the fact that the half-fed children of the poor have not the power to develop the disease into anything like the same severity, or to throw it off when its force has passed away. They die weeks or months afterwards of the many secondary complaints which this terrible disorder leaves behind in weakened constitutions.

The local Board of Health.—This body, next in importance to the corporation, is also presided over by the mayor. Curiously enough, although the town is happily provided with an unusual number of most intelligent medical men, not one is a member of this board. The sole sanitary inspiration appears to be derived *ab extra*—from the report of Dr. Buchanan, made last year, and from a gentleman who combines in his own person the management of the borough police, the inspectorship of weights and measures, and the removal of those nuisances which, so far as his confessedly limited judgment goes, are liable to affect the public health. The board, however, is by no means inactive. It has purchased the waterworks, and has spent a large sum in their improvement. It has effectually carried out the suggestion made by Dr. Buchanan as to the source from which the supply is drawn. It has paved and flagged the streets in a manner worthy of an imperial city, and in these works it has borrowed over £20,000, which, being only some £8000 or £10,000 below the extent of the borrowing powers permitted by Parliament, will form a very serious obstacle to the undertaking of any new or comprehensive improvement for several years to come.

There is no medical officer of health. Some time back it was suggested to appoint one at a salary of £10 a year; but the project dropped through. Last week it was again renewed, one of the members of the board stating that, in his opinion, five guineas per annum would be an ample remuneration—nay, he believed that many gentlemen would be willing to discharge the duties gratuitously.

The Lords of the Privy Council have written to know what measures this board has taken under the Sanitary Act to remove the defects noticed in Dr. Buchanan's Report, and to prevent the spreading of contagious diseases. The board state in answer, that they have flushed and put disinfectants in the superficial drains, and that their inspector of nuisances has reported 658 cases in three years, all of which have been attended to. The great question of drainage has not been for a single moment thought of. Everyone seems to have entire confidence in the cesspool system, and at least one medical man lifts up his voice in its favour. The work of the inspector, so loudly lauded by the board, is little better than a farce. With every desire to do his duty, he has neither the time nor the necessary amount of knowledge. His character is unim-

peachable, and he would be the first to admit his insufficiency. It is true that he reports a nuisance nearly every day, and gets it altered or removed. But of what does he take notice? Foul privies, which are all but universal in the yards and poorer class of houses, and may be found by scores with very slight exertion, form the majority of his complaints. These are, of course, at once cleansed by the application of a little water, only to be as bad as ever in a day or two. Besides these there are reported a few cases of overflowing cesspools, choked surface-drains, and improper accumulations of manure; but, so far as could be ascertained from the record, not one of those grave sanitary defects which we have described above.

The medical attendants on the richer families have, indeed, directed the employment of disinfectants, the cleansing of rooms, the fumigation and destruction of clothing, &c., and in several cases with the best results. One death occurred in a large family after a four days' illness, and no other members have been attacked; another family has hitherto escaped under similar circumstances.

But with respect to the lower orders and the poor, absolutely nothing has been done. Children have died, and the premises have neither been cleansed nor whitewashed. The infected and the healthy continue to live together without the least attempt being made to mitigate the evils under which they labour for want of proper ventilation, space, water, linen, bedding, &c. &c. The clauses of the Sanitary Act might as well have never been passed, since there is so small a disposition on the part of the local board to put forth the powers they confer.

The conclusion is irresistible. The state of the drainage, water-supply, house accommodation, closets, ventilation, overcrowding, &c., is such as to be fraught with danger to the public health. Little or nothing is being done to remedy these evils and to check the progress of a disease which, above all others, requires the closest supervision to prevent its assuming the epidemic form. We cannot but believe that the repeated occurrence of epidemics in the town of Guildford is due principally to insanitary conditions, augmented in intensity on the present occasion by the prevailing heat of the summer. The severity of the existing scarlatinal epidemic is in part due to the apathy of the local board in taking measures to ascertain the presence of so fatal a disease, or to arrest its progress in the way prescribed under the Sanitary Act.

HOSPITAL FOR DISEASES OF THE THROAT.

To the Editor of THE LANCET.

SIR,—I am desired by the Committee of Management of this hospital to inform you that the directing board at the corner of Beak-street was taken down before any allusion was made to it in your journal. The board was put up about two years ago (when the institution was removed from King-street to Golden-square) on the suggestion of one of the guardians of the parish, who had seen the good the hospital was doing. Before the board was put up, the Committee directed that inquiries should be made as to the custom at the general hospitals; and as the result of those inquiries, it transpired that, except in the case of very old established institutions or hospitals, situated in main thoroughfares, it was usual to put up such notices.

To avoid generalities, I may remark that at the time referred to there was a board in Bishopsgate-street directing to the Metropolitan Free Hospital, and there were several large and prominent boards in the neighbourhood of St. Thomas's Hospital directing to that institution. The directing board in Regent-street, "the mysterious disappearance" of which has given you "some pleasure," remained *in situ* for nearly two years, and it was not until about three months ago that I heard it had been objected to by two medical practitioners in the neighbourhood. I immediately commenced a system of inquiry among the new patients and new subscribers, and finding that the board in question had not been appreciably instrumental in bringing either to the hospital, it was removed by order of the Committee.

I am, Sir, your obedient servant,

Golden-square, Aug. 17th. GEO. WOOD, Secretary.

*** As the removal of the offensive board in question did not take place until after we had begun to direct attention to the Hospital for Diseases of the Throat, the portion of the Secretary's letter referring to it needs no further comment. If the authorities are sincere they will remove the board at the corner of the street leading to Golden-square as well. We utterly deny that it has ever been usual for recognised hospitals to put up boards of a similar character. If the Secretary will turn to THE LANCET of a few years ago, he will find some strong remarks respecting some boards scattered over London directing attention to a certain Ophthalmic Hospital; and the fact that an institution like the Metropolitan Free Hospital has a board in Bishopsgate-street has no bearing on the general merits of the question. The case of St. Thomas's Hospital is peculiar; a well known institution suddenly transported to a new and intricate neighbourhood may well put out a directing board to help those in search of it to discover its locality. But in the case of the Throat Hospital, the board we allude to was not a mere direction, but a flaunting advertisement, which was well calculated to catch the eyes of those who had previously never heard of such an institution. All our public hospitals do *not* stand in open thoroughfares—take King's College Hospital for example; yet, those who want to find them can do so without extraordinary assistance.—ED. L.

To the Editor of THE LANCET.

SIR,—I have waited until now in the hope of seeing an account of the resignation of Sir William Jenner and Sir William Fergusson as consulting physician and surgeon to the "Throat Hospital." Surely neither of these distinguished members of our profession can have the slighest idea of the evils which such an institution inflicts on surgeons in general practice. Were they acquainted with those evils, I am sure they would immediately cease to belong to it. If I mistake not, Sir W. Fergusson signed the protest against the Stone Hospital. Why? Because it interfered with the practice and teaching in our hospitals. It affected hospital surgeons directly. The hospital for Diseases of the Throat may not do this; but it inflicts a serious injury on a large class of gentlemen who, like myself, are in GENERAL PRACTICE.

August 17th, 1868.

TRANSIENT APHASIA FROM THE USE OF OPIUM.

To the Editor of THE LANCET.

SIR,—A few days ago a lady returned to me for alteration a prescription which I had written for a powder containing opium, saying that opium invariably disagreed with her. Upon close inquiry as to the grounds of this statement, the patient asserted that this drug (in addition to other results), when given in small doses, always caused her to be talkative, and "to talk foolishly," as she "called things by their wrong names." This peculiarity passed off when the general effects of the drug ceased. I was unable to find out the exact amount of what she called a *small* dose of opium.

I would say that the lady has no symptom whatever of any cerebral disease, and suppose that the effect of the opium above described was the result of some peculiar modification of cellular or vascular action within the brain.

Not long ago I saw a young woman with epilepsy, in whom the epileptic attacks were ushered in by, and partly consisted of, an uncontrollable desire to sing, or rather to "warble," as she was ignorant of music; and her singing consisted in uttering a low and painfully plaintive succession of unconnected musical sounds, which escaped from her irrespective of place or surrounding people or circumstances.

May I ask if any of your readers can furnish from their own experience any instances in which opium or any other remedial agent has produced similar effects, or can refer me to recorded examples of the kind?

I am, Sir, yours &c.,

Upper Brook-street, August, 1868. JOHN W. OGLE.

HOSPITAL SURGEONS IN PARIS.—Hitherto such surgeons were expected to retire at sixty, but a change in the bye-laws has lately extended the limit to sixty-three years. It is said that the change is owing to the somewhat unsatisfactory answering during some of the last competitive examinations. This state of things has induced the authorities to lessen for a time the number of these examinations.

THE LANCET.

LONDON: SATURDAY, AUGUST 22, 1868.

WE attach great value to the papers lately published in this journal by Dr. C. J. B. WILLIAMS and his son, Dr. CHARLES THEODORE WILLIAMS, "On the Nature and Treatment of Pulmonary Consumption as Exemplified in Private Practice." Dr. WILLIAMS speaks on this subject with a unique authority. He has been studying and treating chest diseases for forty years. He is himself free to confess that in the first part of this period the duty of the physician in regard to pulmonary phthisis was unsatisfactory enough. Medical duty consisted in watching the slow "gradations of decay," and making little other contribution to the "distressing tragedy" of a case of phthisis than a prognosis of two years' duration, and such treatment as tended to the alleviation of its more symptoms. Dr. WILLIAMS has outlived this period. He has lived into another and continues an authority in it; and if we wanted an illustration of the triumphs of scientific medicine we should scarcely prefer another to that which Dr. WILLIAMS has supplied in the case of phthisis. According to very reasonable calculations, the average duration of the life of phthisical patients has been extended from two years—the limit assigned by LAENNEC and LOUIS—to eight years. This calculation does not include cases occurring in Dr. WILLIAMS's experience in the last ten years. A comforting thought is, that if phthisis can be extended from two to eight years, there is good ground for hope that it may be indefinitely extended. Moreover, this is a true medical triumph. It is the result of the discovery of a real remedy, if not a specific one, and of a clearer conception of the true pathology of the disease. The medical world has been almost startled of late by the boldness of doctrine on this subject. VILLEMIN'S experiments, showing the possibility of producing phthisis in some animals by the inoculation of tubercle; Dr. BUDD'S suggestion in our columns that consumption is a zymotic disease; Dr. BUCHANAN'S investigations, and of those of BOWDITCH in America, tending to show that the drying of soil, which has in most cases accompanied the laying of main sewers in improved towns, has been attended with a very marked diminution of phthisis; the growing agreement of pathologists as to the nature of tubercle, and its relation to commoner forms of exudation; and the very important qualification necessitated in the doctrine of the inoculability of tubercle by the experiments of our pathologists, especially Dr. ANDREW CLARK, Dr. WILSON FOX, and Dr. BURDON-SANDERSON,—all these things tend to raise our hope that we are on the border of much more accurate knowledge of this subject than has obtained hitherto. But the pathological and etiological departments of this subject are still full of profound difficulties, and we shall for some time to come have to act upon the practical views of physicians rather than upon the theoretical views of pathologists. Let us, then, endeavour in a short space to state the lessons of Dr. WILLIAMS's experience on this subject.

The first lesson is a moral one—that we should no longer look upon a case of phthisis as hopeless. Rather, we should regard it as eminently capable of judicious or injudicious treatment. Some of the histories of cases detailed by Dr. WILLIAMS are very graphic illustrations of the real nature of medical duty, as well as of the encouragement there is for the persevering treatment of even bad cases. They show an ever-recurring fight with the ugliest symptoms. Take one case by way of a specimen. A clergyman, aged thirty-four, first consulted Dr. WILLIAMS in 1848. He had had hæmoptysis fourteen months before. At this time he had cold and cough, and the following physical signs: dulness and tubular expiration in upper right chest, bronchophony and mucous rhonchus below the right clavicle. A few weeks after this he had a further attack of hæmoptysis in church. What is the chequered history of this (as would then be thought by Dr. WILLIAMS) most unpromising group of symptoms? "In 1849, well till last few weeks, when he had temporary cough; 1852, well and doing double duty till a year ago, when he caught severe cold and had hæmoptysis twice at short intervals; 1854, went to Madeira and passed a second winter with benefit; 1856, married; 1868, reported quite well, with a family of six children. Since last report has had two or three attacks of hæmoptysis, and some years ago severe bronchitis and congestion of the lungs. At present he is in excellent health, doing parish duty, which he has not omitted for more than two months at a time for the last twelve years. Nearly twenty-one years have elapsed since the first symptoms."

The study of the facts of individual cases of this kind seems to us calculated to make a deeper impression on the mind than statistical statements. And yet some of the statistical facts are very encouraging. Thus the 500 cases tabulated for these papers included no fewer than 287 of ten years' standing and upwards. Of the 500, 116 are dead, and 384 were alive at the last report. In more than half of them the lungs improved. In one-sixth they remained stationary. Fifty-six cases were of twenty years' standing, and constituted nearly one-seventh of the whole number. These facts, and the slow progress of the disease in the great majority of cases under present modes of treatment, make hopefulness and painstaking on the part of the practitioner a duty.

It is not our design to go minutely into the views of Dr. WILLIAMS. We take it for granted that our readers have ascertained these for themselves. His views of the pathology of the disease are not only such as he has long held, but they accord substantially with the recent light of pathology on this intricate subject. He regards tubercle as related to pus, lymph, and other forms of inflammatory exudation: "The whole clinical and pathological history of grey tubercle seems to separate it widely from cancer and other growths, and to approximate it to pus, lymph, and other exudation materials, as a modification of the ordinary process of textural nutrition." Tubercle may either be deposited insidiously, or with symptoms of an acute or inflammatory kind. Of the 500 cases selected for analysis by Dr. WILLIAMS, 66 are described to have taken their origin in inflammation of the lung or pleura, and 84 in severe cold, which may be supposed to have included some form or degree of bronchial irritation. The hereditary element was very marked in Dr. WILLIAMS's cases, being made out in 45·2 per cent.

The treatment pursued by Dr. WILLIAMS arises naturally out of his views of the disease. Where any decided inflam-

matory symptoms exist, he endeavours to subdue them by salines, blisters, poultices, and like measures. But this discipline is only preliminary to the treatment that is to correct the error of textural nutrition in which the disease essentially consists. All remedies are secondary to cod-liver oil. But the mineral acids and bitters are constantly prescribed. There is a striking gradation in the success of the treatment to be traced in the summary given in Dr. WILLIAMS's last paper. The first improvement (from 1838 to 1848) was in connexion with the habitual use of mild alterative tonics, especially iodide of potassium, with sarsaparilla and other vegetable tonics. These were at first given with alkalies, and in other chemically doubtful combinations. The lowering effect of alkalies led to the substitution of the mineral acids. In the latter half of this period cod-liver oil came into use, and its usefulness and efficiency have gone on increasing with improved preparation and methods of administration, in connexion with various tonics, and certain rules of diet and regimen.

The great success of Dr. WILLIAMS's treatment cannot be dissociated from the social position of his patients and their ability to protect themselves from cold and other hardships by change of climate and various comforts. But even in hospital and dispensary practice great results may be obtained from such measures as he recommends. And we are glad to have been the medium of placing on record the particulars of his long practice. It must be a great pleasure to him to be able to regard tubercular disease so much more hopefully at the present time than he did forty years ago. Let the enemies of medicine say what they will, it is a progressive and useful science.

IT is well known that, under ordinary conditions, a current of electricity passes from the natural or artificial longitudinal surface of a muscle to its natural or artificial transverse section. Various causes have been assigned for this by DUBOIS-REYMOND, Dr. RADCLIFFE, and others. In a paper published towards the close of last year M. L. HERMANN breaks new ground, and maintains that the phenomena observed have a chemical origin. Previous researches had already led him to the conviction that in the act of muscular contraction, as well as in the peculiar condition of post-mortem rigidity, changes identical in their nature, resulting in the disintegration or splitting-up of some complex substance previously present in the muscle into lactic or carbonic acid and myosin, take place. Precisely similar changes, only far more gradual, he believes, occur throughout life, even when muscle is in the state of so-called rest; but their activity is immediately accelerated by the application of any stimulus to the muscle; and if the disintegration be continuous, without coetaneous and corresponding synthetic processes tending to the restitution of the muscular substance, tetanus or rigor mortis must ensue. In the act of making a transverse section of a muscle a violent mechanical stimulus is applied, which causes its most superficial layer to be destroyed and to pass into a tetanic condition. By the same act the ordinarily slow processes of disintegration taking place during life are materially accelerated in a number of layers of the muscle lying successively more and more distant from the surface of the section. But it is highly probable that the disintegrating processes, after attaining a certain degree of intensity in any single layer, progresses afterwards more and more slowly till complete tetanus or stiffening occurs. Hence, after the lapse of a short time, the layer undergoing most active change will not be the exposed surface of the section, but some layer situated more or less deeply. On theoretical grounds, M. HERMANN thinks it probable that those parts of the muscle which are undergoing active disintegration behave themselves negatively to those which are undergoing the same changes more slowly; and he furnishes various proofs that, by accelerating the chemical changes, any chosen part of a muscle may be made strongly electro-negative to the rest. One mode by which the acceleration may be induced is the exposure of a portion of a muscle to a temperature of 100° F., the remainder being kept at 60° F. The former will invariably be found to be electro-negative to the latter. M. HERMANN shows also that in a fermenting fluid an electrical current can be made evident, passing from the substance undergoing fermentation towards the former. This he has ingeniously made apparent by constructing one of the poles of a galvanometer of a piece of cheese, and immersing it in a solution of milk-sugar, in which the other pole, made of an indifferent substance, was also plunged. In this instance it will be observed decomposition of a complex substance (milk-sugar) takes place under the operation of a ferment (cheese); one of the results being an acid (lactic acid)—conditions which are essentially analogous to those occurring in the splitting-up of muscular and nervous tissue, that are constantly taking place both in life and after death. Moreover, it may be shown that of two layers of muscular substance in juxta-position to one another, that one which is undergoing disintegration more rapidly than the other, and which therefore acts upon the latter as a ferment, will be electro-negative to such more slowly decomposing layer, and, it is important to observe, more energetically so in proportion to the activity of the changes taking place in it. Hence it follows that the surface of the transverse section of a muscle, which, owing to the mechanical irritation to which it has been subjected, and to the action of the oxygen of the air, is undergoing disintegration with the maximum of rapidity, will necessarily be negative to every other part of the muscle, but especially to the natural longitudinal section that is well protected by its investments of perimysium and sarcolemma. This mode of explaining the phenomena observed seems to have an important bearing on the theory of electrotonus, to which we intend to refer on a future occasion.

THE obstinacy of the Poor-law Board has received a new illustration in the way it has chosen to ignore the important recommendation made by the Select Committee of the House of Lords to which Earl DEVON's Poor Relief Bill was referred. By a vote, in which the noble President of the Poor-law Board shone in a conspicuous and lonely minority, it was resolved that the sick poor ought to be entrusted to the care of a class of skilled inspectors, specially qualified by their previous training and pursuits for this important duty. The proposition is in itself so reasonable that it commands the assent of all those who have turned their attention to the existing treatment of the sick poor. Nothing but the most stupid jealousy on the part of the permanent officials could resist so obvious a remedy for existing evils, especially as similar arrangements to those proposed exist in every other department of the public service.

The vote of Lord DEVON is the more remarkable because we remember that his Lordship introduced a deputation in 1865 to the Right Hon. Mr. VILLIERS from the Ladies' Workhouse Visiting Association, at which a similar recommendation was made. That deputation was accompanied by a large number of noblemen, members of Parliament, and clergymen, together with the presidents of all the medical corporations. Lord DEVON then thought the question worthy of consideration, and, with a knowledge of his Lordship's kindly disposition, it is impossible not to believe that his mind has been unduly influenced by those around him to reject assistance which daily observation both of in-door and out-door medical relief shows to be so necessary. It is rumoured, also, that an ingenious method of "how not to do it" has been devised by the chief obstructive secretary—that a list of eminent professional men will be submitted to the guardians, who will be permitted to avail themselves of their services as inspectors whenever they think the sanitary condition of the wards and the treatment of the sick poor need to be revised. These gentlemen are to be paid for their services by the guardians, who are for the most part satisfied with the present arrangements, and will be little disposed to call in such assistance, even when in reality it is urgently required. No good could come of such desultory work; and even the Poor-law Board would find that a new and independent authority had been created, over which there could be no control. Confusion is already one of the crying evils of the present administration, the sick and paupers generally being treated far less according to their real wants than according to the ideas and pockets of the guardians. Medical inspectors, to be of real use, ought to be independent of the guardians, and to have permanent relations with the Poor-law Board and with each other, that something like uniformity may replace the chaotic arrangements now sanctioned. It is intolerable that the inspection of sick wards shall be left in the hands of gentlemen who have no qualification whatever for the duty. Barristers, military men, and retired linendrapers may superintend the administration of relief to the able-bodied; but they know nothing of the sick. It would be as reasonable to entrust a doctor to command an army, and expect a victory, as it is to carry on a war against sickness and pauperism without qualified commanders. The subject of Poor-law administration will be discussed ere long. The appointment of a staff of medical inspectors must come, and it is to be hoped that the present cruel and repressive measures will be replaced by a wiser and more humane administration of relief to those who really need it, and by the adoption of more deterrent measures towards those who would require nothing if only they chose to work.

WE are glad to see that the condition of the naval medical service is attracting attention outside the profession, and the correspondence which appears in the several naval and military journals shows how widespread the feeling is that some very radical improvements are necessary. Even the *Army and Navy Gazette*, which has hitherto snubbed all the aspirations of the medical department, was fain last week to acknowledge that "the dearth of medical officers is still severely felt throughout the navy, and, unless the Lords of the Admiralty shortly adopt some conciliatory measures, the consequence will, at no distant period, be found to be very inconvenient. The candidates at Somerset House are not the best specimens, and perhaps the idea of a naval medical college will crop up again."

We fully concur with our contemporary in these gloomy anticipations, and in its statement that the quality of the few candidates is not superlative. If the "idea of a naval medical college" means an establishment at Greenwich after the excellent model of Netley, it will have our warm support; but any revival of the proposed "naval medical cadet" system will not be tolerated by the profession for a moment.

It may be from force of circumstances which are insuperable, but it certainly appears to us that the Director-General of the Naval Medical Department does not give that support to his subordinates which they might expect, and which it is his duty to afford them. Take the case of Dr. STIRLING. We have no doubt Dr. BRYSON has communicated with their Lordships on the subject; but has he formally protested against the unjust treatment one of his department has received?—and has he left any public record which can be used at some future period showing that at least the Director-General stood by his own officer? But in smaller matters the Director-General seems to be a mere nobody, and to be powerless to stay an injustice due to some "executive" authority. We take the case of a late assistant-surgeon of the navy who, having quitted the service with regret after a few years' commission in the tropics, writes to the *United Service Gazette* as follows:—

"Scarcely had I held a home appointment for two months, when I was ordered to join a small tender on the West Coast of Africa. On remonstrating at the Admiralty, I was told they had no one else to send. This was not the case, as there were several who had been at home for more than a year, and some more than two. On informing the Director-General of my appointment, he pretended utter ignorance of the fact; and, on my mentioning the name of the ship, he asked me, with a sardonic grin, 'Where is she?—and what is she?'"

Now, here is a palpable reason "why the navy cannot get surgeons," or rather why, having got them, it cannot keep them. Here we have a gentleman, at his most useful period of service, forced to resign because he felt it impossible to face the coast of Africa in a gun-boat to which he was appointed out of his turn, and the Director-General pleading total ignorance of his appointment and of the whereabouts of his vessel. Dr. BRYSON only succeded to the Director-Generalship in 1864; but his qualification as a licentiate of the Faculty of Physicians and Surgeons of Glasgow dates from 1825, and he cannot, therefore, be far from that age when retirement from the public duties of the profession is expected in civil life—a rule which might be extended with advantage to the public services.

Medical Annotations.

"Ne quid nimis."

THE SICK-CLUB QUESTION.

IN justifying concerted action upon the question of medical remuneration for attendance upon sick clubs, we are borne out at once by the principles of common sense and of medical ethics. Why are we a faculty, a medical body, bound by all sorts of honourable obligations to society and to each other, but for the purpose of maintaining the moral and scientific character of the profession? How are we to bring about

changes necessitated by the social changes of the country if we cannot act together—if one or two men, perhaps strangers, may spoil a movement the reasonableness of which is admitted by all unprejudiced persons? Are we to look with complacency upon men who love their own interests better than the interests of the profession at large, and who, in order to further the former, would compromise the latter? To say so would be to magnify the quality of selfishness which in professions at least is properly subordinate to considerations of general advantage. It is sought to disparage the recent action of medical men on club questions by comparing it to the action of certain bodies which of late—by their unreasonableness and their excesses, not by reason of the fundamental principle of united action—have brought discredit upon themselves, and injury upon some of the great commercial interests of the country.

The medical officers of clubs who, in defence of a principle—that of a claim to reasonable remuneration,—have forfeited good appointments need not be frightened by a comparison which is meant to be odious, but which does not hold. In our last notice of this question, we said that though men may give their services on any terms they please, yet there is a strong moral obligation upon professional men to decline to give professional services on terms which the great majority of their brethren think to be inadequate. "This," we said, "is the tacit law which determines all our fees, and without which no respectability of status can be maintained." In saying this we were, of course, neither very original nor very acute. We were, consciously or unconsciously, only repeating the ethical principle which guides medical men, and which is thus stated by Percival. In chapter ii., section 15, at page 39, he says:—

"Some general rule should be adopted by the Faculty, in every town, relative to the *pecuniary acknowledgments* of their patients; *and it should be deemed a point of honour to adhere to this rule with as much steadiness as varying circumstances will admit.*"

The principle, then, of making a point of honour of the observance of charges determined by a general agreement of the profession, is as old as Percival; and as it has been copied almost verbatim into the recent code of medical ethics adopted by the American Medical Association, we may presume that no truer or higher principal for the guidance of medical men has yet been discovered. In our profession, which does so much—and this most willingly—gratuitously, it is urgently necessary to make a stand for proper rates of payment when we are paid. If a few men will, for their own ends, heartlessly spoil a great reasonable movement, they violate, according to Percival, a point of honour, and must be dealt with accordingly. If the medical men of Birmingham, Oldbury, Wednesbury, or other places, were doing anything excessive or unreasonable, the case would be entirely different. But they are not. It is the general opinion of the medical profession—we might say of the public—that five shillings per head per year is only as reasonable a club charge as the charge of a guinea by a physician for his advice; and just as we should disown the physician who lowered the general estimation of his order by charging half a guinea, we should decline professional intercourse with the man who takes three shillings, or two and a half, when he should, by the general opinion of his brethren, have five. Amongst other opponents of the movement for increased remuneration of attendance on clubs, is an unqualified practitioner at Oldbury. It will be seen, on another page, that the Medical Act has been properly brought to bear on him for falsely pretending to be a surgeon.

NATURAL SCIENCE FOR MEDICAL STUDENTS.

IN the present number of THE LANCET will be found the paper in Natural Philosophy put before candidates for honours at the Preliminary Scientific Examination for the degree of M.B. of the University of London. This paper, though, it is true, an "honours paper," reminds us of the necessity which exists for some change in a matter which has been hitherto regarded with much distrust by those interested in medical education, and which has furnished a subject for considerable discussion in the Convocation of the University of London—the so-called Preliminary Scientific Examination for medical students. From the last report of the proceedings of the Annual Committee of Convocation we learn that the Preliminary Scientific Examination was instituted in 1860, and was held for the first time in 1861. Its introduction had the inevitable drawback of increasing the *number* of examinations for the degree of M.B.; but this was thought to be counterbalanced by a re-arrangement of the subjects of the examinations, by which Zoology, Chemistry, and Botany were put together, and, with the *additional* subjects of Mechanical Philosophy and Natural Philosophy, formed the subjects of the new test of medical knowledge. The Sub-committee reports that the effect of this examination in the seven years it has existed has been anything but satisfactory; and we find from the Calendar that in this period 619 candidates presented themselves, of whom only 362 were successful, nearly half the number each year being rejected with the greatest regularity. But the effect which this extra examination has had upon the strictly medical examinations is the most noticeable feature connected with it. The numbers presenting themselves for the First M.B. Examination have fallen off remarkably, and *a fortiori* those for the Second M.B., there being but 22 successful candidates at each examination last year. We rejoice to find the Sub-committee stating boldly its opinion, "that the introduction of the Preliminary Scientific Examination has tended to perpetuate and increase an evil long complained of by well-wishers to the University, as well as by its opponents—the tendency of its curriculum to give prominence to theoretical and scientific knowledge at the expense of a sound practical acquaintance with Medicine, Surgery, and Midwifery.

This is a very serious matter, and one which we believe is by no means visionary. The Sub-committee goes on to state that in some of our largest schools the students may be divided into two classes, the "University" and "Non-University" men, and that while the latter are distinguished for their steady progress in the ordinary curriculum of the school, and for their work in the wards, the former are "largely occupied in preparing for the three successive examinations for the M.B. degree." And again the Committee says, "It is to be feared that those undergraduates who break down before obtaining the degree (about 68 per cent.) are very often at the end of their career as students possessed of little more than the minimum of knowledge of medicine and surgery required by the licensing bodies, with whose qualifications they are obliged to be content." To counteract this very serious state of things the Committee has recommended, and Convocation has reported to the Senate, that it is expedient that the Preliminary Scientific Examination should be passed before the first winter session of medical study; that it should be held in August—i.e., at the end of the summer session; and that it should be entirely dissociated from the First B.Sc. Examination.

PROFESSOR RICHET'S EULOGIUM ON JOBERT DE LAMBALLE.

THE annual public sitting of the Faculty of Medicine of Paris took place on the 14th, and, strange to say, was unattended by any manifestation on the part of the students; their conduct was indeed remarkably quiet and orderly as compared with preceding occasions. At 1 P.M. the doors of the School of Medicine were thrown open to those visitors only who could produce a printed invitation from the dean. The main feature of the proceedings was the delivery of Professor Richet's eulogium on Jobert de Lamballe. The Professor's discourse contained many valuable points, and evinced sound

judgment, nice discriminating power, and elevated sentiments. He drew a faithful picture of Jobert's tormented and chequered existence. The contrasts which marked his life were described in graphic terms. When Jobert came into the world, his parents were in such miserable circumstances that his mother gave birth to him on a bundle of hay, which scarcely protected her from the dampness of the ground. Yet the boy rose in due time to great surgical eminence, and became the possessor of high scientific and worldly honours and considerable wealth. Next it was told how young Jobert was brought up, out of charity, by a kind-hearted curate, who sent him to Paris in order to go through his medical studies; and how he there commenced a weary life of toil and misery. Jobert lodged in the Hôpital St. Louis, where, but for the kindness of the sisters, he had almost starved. Besides this, he had to contend with his many physical imperfections. He was of a most timorous disposition, and expressed himself with the greatest difficulty. Notwithstanding these various obstacles, he made his way through the different competitive examinations by dint of energy and perseverance. M. Richet took a most favourable view of Jobert's abilities as a surgeon, and of his scientific labours and writings. His researches on union by first intention, on gunshot wounds, on the juxtaposition of tissues of like texture, on the cauterisation of the os uteri, and on vesico-vaginal fistulæ, were spoken of as performances which would ensure Jobert a goodly rank amongst the distinguished and useful surgical investigators of the age. Jobert's real value as an operative surgeon was alluded to with just praise. He was possessed of all the qualities which form a safe, daring, and skilful operator. He was a thorough master of anatomy, had a dexterous hand, and showed great self-possession, promptitude, and ingenuity in the emergencies of his practice. But he was as bad a professor as he was a good surgeon. In estimating Jobert's private character, M. Richet said that "the man was worth more than his reputation." M. Richet ascribes the strange oddities and inconceivable transitions of humour which made Jobert so remarkable, previous to the final wreck of his intellect, to the constant efforts and tension of his mind while dealing with his own imperfections and with the difficulties of his life. Jobert was constantly at war with himself or with others. The sad misfortune which befell the celebrated surgeon, depriving him of the joys and solace of a family, also tended to develop this disposition. Yet beneath the roughness of his surface there were many real and good qualities: staunch fidelity to friends, and gushes of kindness and charity. Jobert had been accused of being selfish, and of having charged enormous fees for his surgical services. M. Richet denied the first of these accusations; and, in alluding to the second, he laughingly said that even in this respect Jobert did not wish to be behindhand with his rivals.

PHYSICIANS' FEES.

AN article with this title has appeared in the *City Press*, and been quoted in some of the daily newspapers. The writer, who appears to be strangely ignorant of the actual position of the medical profession, suggests that there should be a "modification of the fees of physicians." He thinks it would be a great boon to the public if the "physician" would set aside certain hours of the day in which he would see patients for a small fee, such as half-a-crown or five shillings. By adopting this practice, it is argued that people of moderate means would be saved from applying to druggists, or from taking quack medicines, which they now do because the guinea fee is beyond their power to pay. The writer ignores the fact that in this country there are thousands of qualified practitioners to whom the persons he alludes to can apply, and receive not only advice, but medicines also, for something less than five shillings. The "physician" to the families of nineteen-twentieths of the population is what is denominated the "general practitioner." But it must be remembered that he has given evidence of his capacity to treat disease in any and every form that may present itself to him. Is the writer in the *City Press* aware of this fact, or does he ignore the existence of the "general practitioner" altogether? The word "physician," as used by the vulgar, seems to imply to them that he is a person of superior skill, and undoubtedly there are many men amongst "physicians" who are entitled to be so regarded. But it would be a serious mistake, and one fraught with the greatest injury to the public, if the opinion should be generally entertained that the only competent practitioners of medicine are those who style themselves "physicians." The truth is that mere titles nowadays go for little or nothing. We are leveling upwards; the education of the mass of the profession is improving day by day, and the old times of the "physician" and the "apothecary" are passed never to return. The "physician" cannot now, as he did in times gone by, rest his claim to public confidence merely on his title. He must prove to the public and the profession that he possesses some more valid claim to their support.

WATER-SUPPLY OF LONDON.

THAT the water-supply of London is intimately connected with the health of the citizens no argument is necessary to prove; the accumulated evidence supplied by past epidemics leaves no doubt upon the matter. And as many schemes are before the public for an improved supply to the metropolis, it is important to determine which of them it would be best on every ground to adopt. Dr. Farr reviews these different schemes in his Cholera Report, and is very clearly in favour of Mr. Bateman's plan for bringing hither the pure waters from the Welsh hills. This fresh mountain water, being kept free from pollution, would require no filtration; it would convey, Dr. Farr says, "neither cholera matter, nor fever germs, nor any other zymotic substance generated in the bodies of men and cattle"; in addition it would be of a very soft character, and therefore very economical for household use. Dr. Farr considers there would be great danger to health under any plan of "duplicate service,"—one of pure water for drinking, and the other of ordinary river water for other purposes; such a system could only be accepted if there were no alternative. The present average daily supply is 32 gallons per head, and there is no reason to believe that this quantity will or ought to be lessened. All credit is given to the London water companies for their endeavours to get the best quality of water obtainable from the Thames and the Lea; but Dr. Farr maintains, on the authority of Pasteur, Sir Benjamin Brodie, Mr. Bailey Denton, and others, that so long as the watercloset system is in use in the upper valleys of the Thames and Lea, the waters below can never be free from appreciable contamination, and that "accepting the existing reign of the watercloset, the sewage-irrigation remedy for rivers as sources of water-supply is a policy of despair."

As regards the cost of Mr. Bateman's plan, Dr. Farr estimates that the annual charge would be £900,000 for 130,000,000 gallons of pure soft water delivered daily at high pressure on the constant system; while the water-rents for 96,000,000 gallons of hard water, subject to sewage contamination, and delivered on the intermittent system generally, amounted in 1866, according to the companies' returns, to £799,536. This estimate provides for buying up the interests of the present companies, the recommendation being that London, through its Board of Works, should take its water-supply into its own hands.

NURSING IN THE DEVONPORT WORKHOUSE.

ON the 14th instant the unsatisfactory nature of pauper nursing was brought under the notice of the guardians by W. P. Swain, Esq., F.R.C.S., &c. In a calm and eloquent address he laid down the principle that a pauper, the instant

he becomes sick, deserves the same care, skill, and attendance as any other sick man in the world, be he prince or peasant. He then quoted the opinions of Miss Nightingale, Mrs. Jameson, and Miss Twining, that the system of employing paupers to attend on paupers is a vicious one, and results in manifest abuse; and he concluded with detailing a series of cases in evidence against the staff of so-called nurses employed in the Devonport Workhouse. There appears to be one paid nurse for about 180 patients. This woman has had no training, properly so called; and if the statement of the governor of the workhouse is to be trusted, she ought not to be allowed to remain a single hour in the house. She is in the habit of going into the wards in the morning and calling out, "Are you dead or alive here?" and does not obey the doctor's orders. As to her pauper assistants: one gave evidence that she was called from the mangle to the sick ward, where she had to attend upon an old woman very ill. She was totally ignorant what to do, and requested to go back again. Another patient, who had been in the Royal Albert Hospital, could not see the old woman in such a state of distress without helping her. In April, 1864, a woman named Radmore lay paralysed. A pauper nurse, in lifting her in an unskilful manner, fractured her arm. She concealed the fact from the surgeon for three days, when the arm was found mortified. Mrs. Roberts, a nurse of seventy years of age, had been out of her mind and subject to fits, was most irritable and unkind to patients, and eventually died in the ward in a fit. These and other horrors, not by any means unfamiliar to those who know what pauper nursing is, created a profound sensation. Many gentlemen, avowedly present for the purpose of supporting the existing state of things, expressed their determination to have a full investigation, and a committee was appointed to examine the evidence in detail and report thereon.

EPIDEMIC DISEASE AT ALDERSHOT.

VARIOUS and uncertain statements have appeared in print relative to the existence of scarlet fever, especially, at Aldershot camp. We are enabled to give the true facts of the case. It seems that cases of measles and scarlatina have occurred in the camp, mainly amongst the children, every month this year. From January to May inclusive 12 men, 3 women, and 47 children were attacked with measles, all of whom recovered. In June and July, 1 officer (from Portsmouth), 2 men, 1 woman, and 75 children were attacked, and 10 children died. During the present month only 1 woman has been attacked. A large proportion of the cases among the children in June and July occurred, we understand, in a range of buildings occupied by the married soldiers of 1st Dragoon Guards in one of the healthiest and most open sites in camp.

The admissions to hospital for scarlatina were, 4 men and 26 children from January to May inclusive, all of whom recovered. From June to the present time 1 officer, 4 men, 3 women, and 33 children have been attacked, of whom 1 man and 8 children have died. It is satisfactory to know, however, that since the recent change in the weather, the admissions from scarlatina have become less frequent.

PAUPERISM.

A POOR-LAW return just issued shows that in England and Wales, on the 1st of July, 1867, there were 96,079 paupers in workhouses: 3060 men and 9200 women were able-bodied, 46,853 were infirm, and 8372 imbecile or lunatic; 36,966 were under sixteen years of age. Of the total, 29,178 were receiving medical relief, 6095 requiring extra diet daily. On the 1st of January, 1868, the number of paupers had increased to 119,905; and of these, 33,855 were on the medical relief-book, 7373 men and 12,510 women were able-bodied, 56,764 adults were not able-bodied, 8754 were lunatics, and 42,258 were under sixteen years of age. Of the 33,855 under medical care, 7480 were infirm, 11,450 were suffering from chronic disease, 5203 were acute cases, 980 venereal, 1365 zymotic, and 7082 required extra diet.

THE SANITARY STATE OF LINCOLN.

AN able report on the present sanitary condition of the town of Lincoln appeared in our contemporary the *Standard* in the early part of the week. Into the river Witham, that runs through the town, sewers and cesspools alike drain. It has been usual to flush the Witham from time to time by opening certain locks that exist; but recently, in consequence of the drought, the water-supply even in the Trent, which has helped in this operation, has been reduced, and the steam-engine which ordinarily feeds the Witham failed to give a supply of water. The consequence is that a certain part of the Lincoln river, for the length of a thousand yards, "has become a mere elongated tank reeking with sewage,—five sewers and two hundred waterclosets discharging their contents into it." The death-rate increased for the month ending the 4th of August to 37 per 1000. A general complaint was made by those who lived near or upon the river. In this dilemma Lenk's process was used to deodorise the sewage-polluted water, amounting in all to 4,500,000 gallons. Before the alum solution was added, the water "was not only foul but black as ink, and the smell intolerable." After its admixture, the contents of the river soon cleared, and the stench ceased in consequence of the precipitation of the offensive organic matters. The success of the experiment is described in the report to which we have referred as complete. But what do the Lincoln authorities propose to do to prevent a recurrence of the nuisance now for the moment abated? The sources of the river pollution still exist?

A FRENCH MEDICAL SENATOR.

AMONG the promotions of August 15th (a date habitually chosen by the Emperor of the French for distributing his favours) we notice the name of M. Nélaton as having been raised to the high dignity of senator. This is the only example of a medical man *in practice* being promoted to a seat in the Upper French House, whether Imperial Senate or House of Peers. Until now it had been foolishly considered that the dignity of a peer or a senator was scarcely compatible with the nature and busy occupations of medical practice. Under Louis Philippe the peerage was offered to Dr. Double, the King's physician, on condition that he would renounce practising. Dr. Double's private circumstances were such that he might easily, if he would, have accepted the sacrifice in favour of the honour. But he refused through a feeling of pride, and a most laudable concern for the dignity of his profession. We are glad that the absurd prejudice has at length been destroyed, and that such an event has taken place in connexion with the celebrated surgeon we have named.

THE SEWAGE OF CALCUTTA.

THE question of the removal of the present capital of Hindustan has been frequently mooted, and in the opinion of some may soon settle itself through the far-famed city of palaces coming to the ignoble end of being poisoned by the products of its own sewage. To the eastward of Calcutta, at a distance of about a mile, begins a series of swamps occupying some thousands of acres, called the Salt-water Lake. These swamps are covered at high tide by the turbid sea-water which has passed through the Sunderbuns, laden with impurities of all kinds. At low tide a considerable portion of these swamps is laid bare to the action of the hot sun of Bengal. The prevailing winds blow over these lagoons for many of the most unhealthy months of the year, and they have been supposed to be one of the main causes of the unhealthiness of Calcutta. Projects for draining them have been discussed from the time of Lord Wellesley to the present day; and Sir Ranald Martin and Dr. Duncan

Stewart, if we remember aright, expressed their opinions about them upwards of thirty years ago. Nothing, so far as we are aware, has ever yet been done. We now learn that it is proposed by the municipality of Calcutta to conduct the whole of the sewage and excrementitious matters of their city, containing annually a large amount of cholera dejections, into this salt lake, where there is scarcely any tidal flow, and certainly an insufficient one to remove and prevent the deposit of sewage matters. The dry seasons in Calcutta are of long continuance, and the discharge of sewage matters would consequently be liable to be checked or delayed in the main channels or in the connecting ramifications from insufficient water-supply, silting up, and so on. To find a parallel to this project nearer home, we may state that if all the sewage of London in a state of putrefaction were passed into the Essex marshes, it would give some idea of what is about to be done in Calcutta.

The experiment, if carried out, appears to us likely to prove a dangerous one. In India it has been found next to impossible to bring such matters into contact with water without inducing rapid putrefaction, and the system of dry conservancy has therefore proved in that country to be the only one consistent with safety, at the same time that it is the most economical. We should imagine that in a climate like that of India the drainage and sewerage ought to be kept separate. More than one great city in India has been abandoned in consequence of pestilence, and we venture to think that the proposed measure ought not to be entered upon without the gravest deliberation, or the next Viceroy may discover that his future capital has been brought into a dangerously insanitary condition. As it is, we learn that some of the medical men, qualified to form an opinion on the sanitary aspects of the question, have expressed themselves as strongly adverse to this measure, which is, however, warmly supported by the public officer of health.

THE RUSSIAN WOUNDED AFTER ALMA.

MILITARY critics have fallen foul of Mr. Kinglake for many things contained in his late volume on the Crimean War; and army medical officers have now come forward and denied the accuracy of what he has written regarding the Russian wounded. Dr. Massy, the head of the sanitary branch of the army medical service, in a letter to *The Times*, has related the facts which came within his own cognisance, and very clearly vindicated the character of the medical officers of the British army. We have been assured by one who was present that, so far from there being any neglect, he was particularly struck with the humanity displayed by the English medical officers on that occasion. Whatever apathy or negligence there might have been on the part of other branches of the service, there was none whatever on the part of the doctors, for a great many medical officers spontaneously went to the assistance of the Russians, sought out the wounded, and did all that men could do for their relief.

INFECTIOUS DISEASES AND SEASIDE LODGINGS.

ARISING out of the practice of taking those who are convalescent from infectious disease to the seaside for the recovery of their health, is a danger to the public which is by no means sufficiently guarded against. We refer especially to the case of scarlatina. Every medical practitioner, and a goodly proportion of the public, must have at some period of their experience pretty accurately traced the origin of zymotic disease in the families of their patients or their friends to a residence in lodgings at the seaside. Now, it has been specially provided by law that lodging-house keepers and others are liable to a heavy penalty for admitting fresh comers into apartments that have been occupied by those suffering from contagious disease, save after their complete purification. The Sanitary Act of 1866 has the following clause:—"If any person knowingly lets any house, room, or part of a house, in which any person suffering from any dangerous infectious disorder has been, to any other person, without having such house, room, or part of a house, and all articles therein liable to retain infection, disinfected to the satisfaction of a qualified medical practitioner, as testified by a certificate given by him, such person shall be liable to a penalty not exceeding £20. For the purposes of this provision the keeper of an inn shall be deemed to let a part of a house to any person admitted as a guest into such inn."

We counsel the public to assure themselves on all occasions that these conditions have been complied with, and that no evil may be possible to them from the source we have indicated in the places where they quarter themselves at the seaside.

THE HEALTH OF CUSTOM-HOUSE OFFICERS.

NOTHING can be more satisfactory than the report given by Dr. Dickson of the health of the officers of her Majesty's Customs during the year 1867. The numerical strength of the force was 1149; the mean daily number on the sick list 3·3 per cent.; the ratio of cases admitted to the sick list 70 per cent.; the number of deaths 5, of superannuations 2. Notwithstanding the fact that the amount of medical attendance in the year was seriously increased, yet the rate of mortality was extraordinarily low, only 4·3 per 1000, and of superannuation only 1·7 per 1000. This result, coupled with the fact that the average death-rate for the last ten years amongst a body of men much exposed to the inclemency of the weather, is only 10·4 per 1000, is in itself sufficient evidence of the skill, care, and attention exhibited by Dr. Dickson in the performance of his onerous duties. Indeed, considering that a very large proportion of the men are from forty to sixty years of age, the sanitary condition of the service is without a parallel, we believe, in any other public department. The singular exemption from death by phthisis is noteworthy, as that disease is in general the most fatal in the catalogue, and the year was remarkable for its great vicissitudes of temperature and the severity of its winter.

THE ABYSSINIAN GAZETTE.

WE abstained from publishing any of the various rumours and surmises which had reached us about the rewards to be given to members of the several medical services lest we should defeat the efforts which the heads of those services were known to be making in the interests of their subordinates. A lengthy gazette has now appeared, and, while we congratulate the several officers on their good fortune, we are glad to perceive that the authorities have recognised in a fair and liberal spirit—at least so far as the British army is concerned—the great services which the medical officers rendered, and which contributed in no small degree to the success of the campaign. We record our opinion all the more gladly because at one time great fears were entertained that the medical departments would share the fate which befell them when the vote of thanks was accorded to the other sections of the Abyssinian army by the Houses of Parliament. The promotion of medical officers for services in the field is to be regarded as a compliment to the whole department, and it must be viewed in that light by those officers of longer service, under less fortunate circumstances, who may find themselves passed over. Dr. Logan and the other heads of the medical departments deserve, we think, much credit for having conducted their efforts in behalf of their officers to such a successful issue.

THE CORONERSHIP OF WEST MIDDLESEX.

THE Middlesex magistrates, at their last meeting, again declined to pay Dr. Diplock his salary for officiating as coroner

for the western division of Middlesex, though an urgent appeal was made to them by Dr. Diplock on the hardness of his case, and he offered to guarantee them the return of the money if the Court of Queen's Bench decided against him. The Finance Committee also recommended payment; but the Bench were firm in their refusal, and several of the magistrates urged that there was no withholding of justice in that refusal, as Dr. Diplock had not made out a legal claim. The agitation to which this question has given rise will, it is to be hoped, result in some legislative enactment to alter the mode of electing coroners. A short Act of Parliament would settle the matter. Let it define accurately the qualification of the freeholder entitled to vote. Why should not the register of freeholders who have the right to vote for a "knight of the shire" be applied in the case of the coroner? This would do away with the most vicious system that now prevails. Who can, under the present mode, determine who is or who is not a freeholder under the old statute for the election of coroners? What check is there on personation, false claims, or a repetition of votes by the same individual? If the case of Dr. Diplock, painful and unseemly as it is in some of its aspects, lead to the establishment of a better state of things, it will have at least conferred one valuable and important benefit upon society.

THE COLLEGE OF SURGEONS.

AT the Council meeting on the 13th inst., the resignation by Mr. South of the office of Examiner, which that gentleman has held for nearly twenty years, was received and accepted. It is not intended to proceed to the election of Mr. South's successor until after the vacation.

HONOUR TO PROFESSOR SYME AND MR. PAGET.

AT the half-century jubilee of the University of Bonn, on the 4th inst., the honorary degree of M.D. was conferred on Professor Syme and Mr. Paget. The University of Bonn, in this disposal of its honours, selected two of the most meritorious names in British surgery. We do not always agree with Mr. Syme, or approve his public conduct; few living men, however, have done so much to advance surgery as a conservative and useful art. Mr. Paget is at once an eminent surgeon, physiologist, and pathologist, and has done great public service in conducting to so happy an issue the recent serious illness of a princess as much beloved for her virtues as respected for her rank.

THE Registrar-General for Scotland, in a return just issued, informs us that during the quarter ending June 30th, 16,928 deaths occurred in Scotland, being in the annual ratio of 21·2 per 1000, or 1 per 1000 below that of the preceding decenniad. In town and country districts the rates were respectively 25·6 and 17·7. The principal diseases were whooping-cough, scarlet fever, and measles. Typhus and typhoid maintained their average prevalence. The births amounted to 31,025, or 389 per 10,000 of population—i.e., 3·89 per cent. This is above the average of the last ten years. The mean temperature of the quarter was 51·0°.

A SATISFACTORY proof of the value of ordinary sanitary measures is afforded by the last monthly report of the medical officer of St. Giles's district, who reports that the deaths from diarrhœa are only 17, as against 25 the calculated average. This result is due, no doubt, in greatest measure to the systematic cleansing of sewers, the free use of disinfectants, and the acute inspection carried out by direction of the Board of Works during the present season.

CHOLERA prevails, according to latest accounts from India, amongst the native population in different parts of the central provinces, and more especially at Jubbulpore. It is reported that the troops at Kamptee are attacked by the disease.

WE are glad to find that the proposition to erect a new infirmary at Kidderminster has been favourably entertained by the inhabitants of that locality. With a liberality which is very creditable to him, Mr. Lea, one of the rising manufacturers of the place, has promised £1000 towards the undertaking, and his example has been followed by a donation of £500 from Mr. John Brinton (the brother of the late lamented Dr. W. Brinton), who has warmly advocated the necessity of the new building, and is generally anxious to assist in work connected with the profession. A donation of £200 has also been received from Mr. Hancocks, £100 from the Bishop of Worcester, £50 from both the Bishop of Rochester and the present Vicar, and other contributions have been promised.

THE Introductory Addresses at the various schools, at the opening of the Winter Session, will be delivered as follows:—At St. Bartholomew's, Mr. T. Smith; at Guy's, Dr. Moxon; at St. Thomas's, Dr. Barnes; at the London Hospital, Mr. Critchett; at King's College, Professor Guy; at University College, Mr. Erichsen; at St. George's, Dr. Acland; at Charing-cross, Dr. Pollock; at the Middlesex, Dr. Burdon-Sanderson; at Westminster, Mr. Francis Mason; and at St. Mary's, Mr. J. R. Lane.

A HANDSOME testimonial from two hundred subscribers was presented, on Tuesday, to Dr. F. G. Jackson, of Scarborough, but lately of Barnsley. It consisted of a solid silver épergne, with three branches, carrying three figures, representing Faith, Hope, and Charity. On the pedestal is the following inscription:—"Presented to F. G. Jackson, Esq., M.D., by his friends at Barnsley, in recognition of his public and private services, May, 1868." An illuminated address accompanied the épergne, and referred to the services Mr. Jackson had rendered in connexion with the Oaks Colliery Relief Fund.

AT a recent Court of the Governors of the London Hospital it was enacted that in future those members of the assistant staff who have held office for seven years shall be styled Physician or Surgeon. Dr. Langdon Down and Mr. Maunder will have, therefore, respectively the title of Physician and Surgeon to the hospital.

IN our last number we mentioned that Dr. Broca, of Paris, would read a memoir on Aphasia at Norwich. Another French medical notability, Dr. Béhier, who is Clinical Professor of Medicine at the Paris Faculty, will also take a part in the proceedings by reading, if we are not mistaken, a paper "On the Alcoholic Treatment of Diseases."

THE old St. George's students will dine together on the 1st of October, on the occasion of the formal opening of the new school buildings. These consist of admirably and well lighted museum, new lecture, dissecting, and post-mortem rooms, directly connected with the hospital.

DR. BARRY, the new Principal of King's College, will commence his duties in October.

FOUR deaths from yellow fever are reported as having occurred at New York between the 3rd and 7th of August.

A ROYAL decree imposes a quarantine on arrivals at the Spanish ports from England.

THERE is a vacancy in the Coronership for West Surrey, caused by the death of Mr. C. J. Woods. We hope that a medical candidate will be returned by the freeholders.

Address

ON

THE RELATION OF FOOD TO WORK DONE BY THE BODY, AND ITS BEARING UPON MEDICAL PRACTICE.

Delivered at the Meeting of the British Medical Association at Oxford.

BY THE

REV. PROFESSOR HAUGHTON,

M.D., F.R.S., D.C.L. OXON., FELLOW OF TRINITY COLLEGE, DUBLIN.

(*Continued from p. 211.*)

Source of muscular work.—As soon as it was satisfactorily established by Lavoisier and his successors that the natural combustion of carbon and hydrogen in the blood was sufficient, and rather more than sufficient, to account for the animal heat, it became a matter of great interest to physiologists to ascertain, if possible, how much of the work developed in the blood by chemical changes is employed in producing animal heat, how much in mechanical work, external and internal, and how much in vital or mental operations.

At the outset of this inquiry it received a misdirection from the conjecture thrown out by Liebig, that the excretion of nitrogen (in the form of urea) gave necessarily the measure of the wear and tear of the muscular tissues themselves, which are composed of proteinic or nitrogenous compounds. This conjecture led to Liebig's celebrated classification of food into *heat-producing* and *flesh-forming* foods, which has been unhesitatingly received until lately, in this country, by physiologists and physicians.

Before investigating the truth or falsity of Liebig's theory, it is worth while to state the most recent results obtained as to the muscular work per day of which man is capable.

From numerous observations, of which some were made by myself, on the daily labour of hodmen, paviours, navvies, and pedlars, I have obtained the following mean:—

Daily labour of man = 353·75 ft. tons = 109549 kil. met.

This quantity of work is the exact equivalent of the work done by a man of 150 lbs. weight in climbing through one mile of vertical height, and is, as I have already shown, less than *one-eighth* part of the work expended in producing and maintaining animal heat. Even if we add to the external muscular work that of circulation and respiration, which may be estimated at 133 ft. tons, the whole work done by the muscles, voluntary and involuntary, of a hard-worked labourer will amount to less than *one-sixth* of the work expended in maintaining the temperature of his body at 100° F.

I was led to believe, from my investigations as to the quantity of urea excreted in various diseases, that a certain minimum quantity equivalent to 2 grs. per pound avoirdupois of body weight was excreted quite independently of muscular exertion; and I proved that death was preceded in many chronic diseases by a fall in the urea excreted to 2 grs. per pound. These investigations were made chiefly on patients dying of advanced kidney disease, in which the excretion of albumen had nearly or altogether ceased, and on patients dying of phthisis.

Pettenkofer and Voit found that the excretion of urea in a dog reduced to 29 kilos. by ten days' fasting was reduced to 8·6 grms. And, since

29 kilos. = 63·8 lbs.
8·6 grms. = 132·7 grs.
Excretion of urea = 2·08 grs. per lb. of body weight.

Ranke obtained a precisely similar result from observations made upon himself, after long fasting, continued for several days.

If these views be well founded, it is plain that part only of the urea excreted can be regarded as due to muscular exertion, for 2 grs. per lb. (or 300 grs. for a man weighing 150 lbs.) must be set aside as a constant due to vital work, independent of muscular work altogether. Hence it would follow, supposing the muscular exertion to be measured by the increased excretion of urea produced by it, that the urea will not increase as fast as the muscular exertion, but it ought to increase regularly, although at a slower rate. With a view to settle this important question, I devised the following observations upon myself in the month of July, 1866, which proved conclusively that an increase of muscular exertion, amounting to fourfold, is not accompanied by any corresponding increase in the excretion of nitrogen, in the form of urea.

I had previously ascertained by repeated experiments, extending from 1860 to 1865, that my excretion of urea (under ordinary conditions as to exercise, which did not exceed five miles a day), ranged from 465·09 grs. to 537·47 grs. per day; mean, 501·28 grs. This quantity of urea I regarded as my natural physiological average, and it was so well established that I thought I should obtain an important result by comparing it with the average found from several days of unusual muscular exertion. I accordingly walked for five consecutive days in the hilly districts of Wicklow, noting carefully the horizontal distance traversed each day, and the vertical height traversed up and down. The vertical heights were reduced to horizontal distances, on the assumption, which is well founded, that 20 is the proper coefficient for converting one into the other, and on the assumption that the work of descent is half the work of ascent. During the five days of observation the work done, expressed in horizontal miles of walking, was as follows:—

		Miles.
First day.		
Miles walked		11·4
Height ascended ...	1800 ft. =	10·2
		21·6
Second day.		
Miles walked		12·0
Height ascended ...	2400 ft. =	13·7
		25·7
Third day.		
Miles walked		11·6
Height ascended ...	1400 ft. =	8·0
		19·6
Fourth day.		
Miles walked		9·3
Height ascended ...	1400 ft. =	8·0
		17·3
Fifth day.		
Miles walked		10·4
Height ascended ...	1600 ft. =	9·1
		19·5

From the preceding statement it follows that the average work done each day was 20·74 miles of horizontal walking—the result of which upon the urea excreted was to be compared with the result already mentioned, as a physiological constant determined under circumstances in which the daily muscular work never exceeded 5 miles of horizontal walking.

In order to determine the urea, I collected each day all the urine passed, and kept one-fifth part of it; and at the close of the fifth day examined the mixture formed from the five days' urine. It was found to contain 501·16 grains of urea per day; a result identical with the physiological quantity previously found by me under totally different conditions—namely, 501·28 grains. I was much surprised at this result, for I had previously believed in the theory laid down by Liebig, which attributed the excretion of urea to the disintegration of muscular tissue.

It might be objected to the preceding reasoning that there can be no doubt as to the capability of the combustion of proteinic compounds represented by 501·28 grains of urea excreted to produce mechanical force sufficient to explain the muscular exertion of walking 20 or 21 miles per day; as may be shown in the following manner:—

(1) The urea excreted bears to the proteine consumed the proportion of 24 to 79; as appears from their chemical compositions—namely,

Urea	$C_2\ H_4\ N_2\ O_2$	60
Proteine ...	$C_{36}\ H_{37}\ N_4\ O_{12}$	395

(2) In 100 parts of proteine there are 53·7 parts of carbon and 7 parts of hydrogen; the total heat due to the combustion of 1 grm. of proteine is, therefore,

	Heat units.
0·537 grm. of carbon	4·3389
0·070 grm. of hydrogen	2·4123
	6·7512

This number, 6·7512, represents the maximum quantity of

heat units* that could be produced by the combustion of 1 grm. of proteine; but the term depending on hydrogen in it should be reduced to five-ninths of its amount, in consequence of the hydrogen already combined with oxygen in the proteine. Hence we find—

Combustion of 1 *grm. of proteine.*

Carbon	...	...	4·3389 heat units.
Hydrogen	...	...	1·3402 ,,
			5·6791

(3) In 100 parts of urea there are 20 parts of carbon and 6⅔ parts of hydrogen; the total heat, therefore, due to the combustion of 1 grm. of urea is

0·20 grm. carbon	...	...	1·6160
0·067 grm. hydrogen	...	...	2·3089
			3·9249

The term depending on hydrogen in this result should be reduced to one-half, in consequence of the hydrogen already combined with oxygen in the urea. Hence we find—

Combustion of 1 *grm. of urea.*

Carbon	...	...	...	1·6160
Hydrogen	...	...	...	1·1544
				2·7704

4th. From the three preceding statements it is easy to see that, for every gramme of proteine consumed, 0·8416 heat units are contained in the urea excreted; so that

The digestion of 1 *gramme of proteine gives out* 4·8375 *heat-units.*

It is easy to see that 501·28 grs. of urea excreted correspond to 1650 grs. of proteine in the food, or to 106·92 grammes; and the total work due to the digestion of this quantity of food may be found by multiplying it by the "*digestion coefficient*" already found, and by 423, which is Joule's coefficient for converting heat-units into kilogrammeters. Hence we have—

Work due to production of 501·28 *grs. of urea*
= 106·92 × 4·8375 × 423
= 218786 k. m.
= 704 ft. tons.

This amount of theoretical work produced by nitrogenous food is more than double the work actually done during the walking excursion.

The average work was 20·74 miles horizontal per day, which may be considered as the exact equivalent of lifting my weight (knapsack and clothes included = 150 lb.) through one mile of vertical height. Hence the work actually done by me was—

$$\frac{150 \times 5280}{2240} = 354 \text{ ft. tons.}$$

I have elsewhere shown that the work done by the heart per day amounts to 122 ft. tons, which should be added to the external work, as well as the unknown work due to the muscles used in respiration, probably amounting to one-sixth of the heart's work, or 21 ft. tons; adding these quantities we find

External work...	...	...	354 ft. tons.
Circulation and respiration	...		133 ,,
			487 ,,

This quantity represents 69 per cent. of the applied work, which was shown to be 704 ft. tons.

The amount of muscular work accounted for is 354 ft. tons, which is almost exactly half the whole theoretical work supplied by the food that goes to form urea—viz., 704 ft. tons; but it has been already shown that 2 grs. of urea per pound of body weight is required to maintain the vital work, including circulation and respiration. This would give from 240 grs. to 260 grs. of urea out of the 501 grs. available for vital work, so that one half of the available work may be considered as expended on vital work, and the other half as expended on external muscular work. This supposition, however, requires us to believe that the muscles act without loss by friction. This is not admissible, for I have elsewhere endeavoured to show that there is a loss in the force applied by the muscles of various animals in consequence of the friction of their tendons amounting—

In man to	...	...	35 per cent.
In the mastiff to	...	...	41 ,,
In the kangaroo to	...		61 ,,

* Heat unit = 1 kilog. of water raised 1° c.

Hence it may be regarded as certain that the available force represented by 501 grs. of urea is not sufficient to account fully both for vital work and for the external mechanical work expended by me during the experiments just described.

The foregoing observations and calculations were made in the month of July, 1866, but I did not then publish them, as I found afterwards that I had been anticipated by Dr. Fick and Dr. Wislecenus, of Zurich, in a paper published in June in the *Philosophical Magazine*, on the urea excreted during an ascent of the Faulhorn. Professor Frankland, in a paper published in the same journal in September, 1866, corrected some erroneous reasoning that found its way into Fick's and Wislecenus' paper, and further supplied, from direct experiment, the *digestion coefficient* of proteine, which had been obtained by me from calculation. The actual value of this important constant was found by him to be—

Actual value of digestion coefficient of proteine ...	4·3155
Calculated value...	4·8375

My only object in now publishing an account of the independent experiment and calculation made by myself, is to confirm the certainty of the important fact first proved experimentally by Fick and Wislecenus, that the force due to the urea excreted in a given time is not sufficient to provide the actual work that may be done by the muscles in the same time.

Liebig and his followers, misled by a preconception of the simplicity of nature, assigned to nitrogenous food the duty of providing the force necessary for the production of muscular work, by supplying the waste of muscular tissue; while they supposed the farinaceous and fatty foods to provide the amount of animal heat required by the body.

The opponents of Liebig have fallen into the opposite error, and deny that nitrogenous food contributes any portion of the force employed in muscular work.

The truth, as is usual, lies between the two extreme hypotheses, and we are now compelled to admit that a given development of force, expressed in animal heat, muscular work, and mental exertion, may be the effect of several, perhaps many, supposable supplies of digested food, farinaceous, saccharine, fatty, and albuminous.

Just as a given algebraical function may be equated to a given constant, by the use of a certain definite number of values of its variable quantity, so may a given effect of work in the animal body be produced by certain definite, though very different, combinations of various kinds of food, the digestion of which follows each its own law, and developes its own amount of force. The number of roots in our equation of life increases the difficulty of solving it, but by no means permits the acceptance of the lazy assumption that it is altogether insoluble, or reduces a sagacious guess to the level of the prophecy of a quack.

Lavoisier supposed in his earlier investigations that animal heat was developed by the combustion of carbon and hydrogen in the lungs; just as in earlier times it was supposed to be produced spontaneously in the heart, which was imagined to be so hot as even to burn the hand that should imprudently venture to touch it.

In like manner, Liebig and his followers supposed the muscular work to be developed in the substance itself of the muscles that were its instruments.

Both of these doctrines are now justly repudiated by physiologists; and the view proposed in 1845 by Dr. Mayer, of Heilbronn, and recently developed with much ability by Mr. C. W. Heaton, of Charing-cross Hospital, in the *Philosophical Magazine* for May, 1867—that the blood itself is the seat of all the chemical changes that develop force in the body,—has gained favour among physiological chemists, and also met with acceptance among practical clinical observers.

Thus the human mind revolves in cycles, and the physicians of the nineteenth century are preparing to sit at the feet of Moses and learn that the blood of an animal really constitutes its life; while South African theologians reject his authority because he happened to confound a Rodent with a Ruminant.*

No two classes of animals can well differ more from each other than the cats and ruminants, one of which is intended by nature to eat the other. They differ in all respects as to food, the cats requiring a supply of fresh meat and blood for their health, and the ruminants being exclusively vegetable feeders; yet in both classes we find a great developement of muscular power, and of rapid action of muscles, qualities alike

* No reasonable person can fail to perceive the ignorance of the great Law-giver who will apply to him the test first proposed by Swift for Homer. Moses, like the author of the "Iliad," was totally unacquainted with the discipline and doctrines of the Church of England.

necessary to the pursuer and to the pursued. There can be no doubt that muscular work is developed in the cats from the combustion of flesh, and in the ruminants, mainly, if not exclusively, from farinaceous food. It is, however, worthy of remark, that the muscular qualities developed by the two kinds of food differ considerably from each other. The hunted deer will outrun the leopard in a fair and open chase, because the work supplied to its muscles by the vegetable food is capable of being given out continuously for a long period of time; but in a sudden rush at a near distance, the leopard will infallibly overtake the deer, because its flesh food stores up in the blood a reserve of force capable of being given out instantaneously in the form of exceedingly rapid muscular action.

In conformity with this principle, we find among ourselves an instinctive preference given to farinaceous and fatty foods, or to nitrogenous foods, according as our occupations require a steady, long-continued, slow labour, or the exercise of sudden bursts of muscular labour continued for short periods. Thus chamois hunters setting out for several days' chase provide themselves with bacon fat and sugar; the Lancashire labourers use flour and fat, in the form of apple dumplings; while the Red Indian of North America almost transforms himself into a carnivore, by the exclusive use of flesh food; he sleeps as long, and can fast as long, as the puma or jaguar; and possesses stored up in his blood a reserve of force which enables him, like a cat, to hold his muscles for hours in a rigid posture, or to spring upon his prey, like a leopard leaping from a tree upon the back of an antelope.

If the preceding view of the muscular qualities developed by the two kinds of food be correct, important inferences suggest themselves as to the food that should be employed in relation to several kinds of work. Of these inferences I shall select two examples:—

1. The nurses of one of our Dublin hospitals were formerly fed chiefly upon flesh food and beer, a diet that seemed well suited to their work in ordinary times, which was occasionally severe, but relieved by frequent intervals of complete rest. Upon the occasion of an epidemic of cholera, when the hospital duties of the nurses became more constant, although on the whole not more laborious, they voluntary asked for bacon fat and milk, as a change of diet from the flesh meat and beer; this change was effected on two days in each week with the best results as to the health of the nurses, and as to their power of discharging the new kind of labour imposed upon them.

2. I have been informed, on competent authority, that the health of the Cornish miners breaks down ultimately, from failure of the action of the heart and its consequences, and not from the affection of the lungs called "miner's phthisis." The labour of the miner is peculiar, and his food appears to me badly suited to meet his requirements. At the close of a hard day's toil, the weary miner has to climb by vertical ladders through a height of 100 to 200 fathoms before he can reach his cottage, where he naturally looks for his food and sleep. This climbing of the ladders is performed hastily, almost as a gymnastic feat, and throws a heavy strain (amounting from one-eighth to one-quarter of the whole day's work) upon the muscles of the tired miner, during the half hour or hour that concludes his daily toil. A flesh-fed man (as a Red Indian) would run up the ladders like a cat, using the stores of force already in reserve in his blood; but the Cornish miner, who is fed chiefly upon dough and fat, finds himself greatly distressed by the climbing of the ladders—more so indeed than by the slower labour of quarrying in the mine. His heart, over-stimulated by the rapid exertion of muscular work, beats more and more quickly in its efforts to oxidate the blood in the lungs, and so supply the force required. Local congestion of the lung itself frequently follows, and lays the foundation for the affection so graphically, though sadly, described by the miner at forty years of age, who tells you that "his other works are very good, but that he is beginning to leak in the valves."

Were I a Cornish miner, and able to afford the luxury, I should train myself for the "ladder feat" by dining on half a pound of rare beefsteak and a glass of ale, from one to two hours before commencing the ascent.

The excretion of nitrogen by the cats and ruminants is very different, as might be expected from their food. I have ascertained that the urea discharged by a Bengal tiger and a sheep, daily, is as follows:—

Bengal tiger	4375 grs. of urea.
Sheep	256 "

It is worthy of remark, and serves to throw light on the meaning of the excretion of nitrogen from the body, that causes but slightly connected with muscular exertion in the ruminants increase amazingly the excretion of urea. Thus I have found the following excretion of urea from a ram during the rutting season:—

Ram (rutting season) ... ... 1493 grs. of urea.

This amounts to a *sixfold* increase of urea, which cannot possibly be accounted for by the food consumed at the time, but requires us to assume a certain storing up of force, represented by nitrogenous compounds, which has been going on for a considerable period previous to the rutting season. A similar and equally remarkable storing up of phosphates and carbonates takes place, previous to the rutting season, in the ruminants that shed their horns, which in the Cervus Megaceros often weigh 90 lb.

These remarkable phenomena remind us of the maxim of the wise Hippocrates, who recommends moderation in the use of the gifts of the Golden Venus, as well as in those of Ceres and Bacchus—πόνοι, σιτία, ποτά, ὕπνοι, ἀφροδίσια μετρίως; with which may be compared its converse in the Latin proverb—"Sine Cerere et Baccho, friget Venus."

(To be concluded.)

REPORT
OF THE
THIRTY-SIXTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

HELD IN OXFORD, AUGUST 4TH, 5TH, 6TH, & 7TH, 1868.

(Concluded from page 233.)

FRIDAY, AUGUST 7TH.

Many of the members started by the early train for London. At half-past nine a meeting of the Committee appointed to consider the mode of electing to the Council was held. The report was presented at a later part of the day.

At 10 o'clock the sixth general meeting was held in the Divinity School, for the adjourned debate on Dr. Hughes Bennett's report on the Action of Mercury, which stated the mineral in moderate doses exerted no action, and in larger ones greatly diminished the amount of bile secreted.

Dr. BENNETT scarcely thought his paper was exactly one fitted for discussion. So long as the action of the drug was a matter open to difference of opinion it was a different thing; but when facts had established a reliable result there was nothing more to be said. In the tables he had handed round the facts therein contained had reduced our knowledge of the action of the drug in one sense to almost mathematical precision. After explaining the mode of performing the experiments, and their nature, Dr. Bennett proceeded to say that the medical profession had been acting under a delusion in regard to the drug mercury. How it is that it has been so generally used under the idea that it was a cholagogue, and how it is that when persons are what is termed bilious a blue pill and black draught does good, was not his business to determine. The Committee had not been deputed to explain the opinions of medical men; their object was certainly indirectly to show that opinion is not always based upon exact data. He would be glad if medical men would give reasons why they used the drug. He believed it was to be explained by the fact that the idea of its being a cholagogue, taught in the schools, and handed down from book to book, originated from a statement of Paracelsus that hydrargyrum did good in icterus. This was the source of the popular belief. He appealed to Oxford and its literary magnates, and the frequenters of the Bodleian Library, with its classical lore, to give a better explanation. He wished to ask the meeting this question, Did they think that the evidence contained in the tables handed round sufficient to establish the truth of the proposition that mercury does not increase the secretion of bile? Are 33 experiments carefully made on dogs too little or enough? The Committee feel satisfied, but does the British Medical Association? The experimenters are willing to proceed farther if it be thought desirable. Were they (referring to the meeting) satisfied, or will they suggest any further experiment or observation which can elucidate or test the subject more completely? The Committee cannot suggest anything more, but are willing to undertake further inquiry. Do let us, continued Dr. Bennett, settle this question once and for all, and do not

let us assume in the case the position of a profession always disputing about small matters. Medicine is capable of being brought under the dominion of experiment, as is the case with other sciences, and it was for the British Medical Association to take up one drug after another, and thoroughly sift its qualities, and determine its true influence and value as a remedy.

Dr. ACLAND suggested that the meeting should not go into the question of the mode of action of mercury generally, but confine its attention to the fact of the experiments now reported by Dr. Bennett being sufficient and conclusive, or insufficient.

Mr. MEADE gave his reasons for believing that the action of the drug on man could not be determined by experiments on dogs. He preferred an herbivorous animal, as a donkey. The fæces in a dog in health seemed often without bile (album græcum). The biliary secretion in the dog was altered in relation to the kind of food on which he fed, very readily; the dog had a comparatively short intestinal canal, and the relations of his duodenum were not the same as in man. He would not consider experiments on the dog final.

Dr. WATERS observed that the Council must grant money for past expense and future research. The donkey was precluded from helping us from the fact that the peritoneal cavity, on being opened, was so very prone to inflammation, by which experimental results would be vitiated. As regards the whiteness of the dog's fæces, this was due to the passage of a large amount of mineral matter derived from bones; the bile was still in the fæces of the dog, which he believed the best animal for experiment. He thought further experiments should be made, and small doses of the drug given. The committee had used irritating doses, and therefore the function of the liver had been unduly suspended.

Dr. STOKES thought that, as far as dogs were concerned, Dr. Bennett's experiments were sufficient, and he accepted them. The legitimate conclusion from them was this, and this only—that mercury given to dogs does not increase the flow of bile in them. But though Dr. Bennett did not say so, it might be gathered from his report that he applies the results to the case of man as explaining its action in him. Now they scarcely showed that conclusively. The *therapeutic* action of the drug was not yet touched. It was necessary that the ground should be cleared by the experiments of Dr. Bennett's committee, and this committee had done excellent work: they had shown that mercury does not increase the secretion of bile in the dog, and therefore probably not in man. But the action of mercury on disease was another matter. Is there any case of hepatic derangement in which mercury is of use?—that for us was the important issue. Dr. Stokes suggested that Dr. Bennett's committee should direct their attention to the case of man; and they were in a position to arrive at some great truths in regard to the action of the drug.

Dr. SIBSON agreed with Dr. Stokes. He would be sorry if experiments on dogs were altogether stopped. Too large doses had been used. He wanted to know the effect of moderate doses, and this might be got at by employing inunction, which was followed by no harm to the intestinal tract. He would not be satisfied if the experiments on dogs were not carried on to a still greater extent.

Dr. KENNEDY thought too much attention was paid to the quantity, and not enough to the quality, of the bile.

Dr. BROADBENT stated that he had never been under the domination of the false idea that mercury acted as a chlolagogue. He accepted the experiments of the committee as conclusive, and as applicable to the case of man. He thought perhaps the good effects of mercury may have something to do with setting free the flow of bile from the gall-bladder.

Dr. ACLAND agreed with Dr. Stokes. He was satisfied, on the whole, with the experiments on dogs. But if Dr. Bennett concludes from them that mercury was useless to him, he differed. Dr. Bennett would have to give a great deal of mercury to dogs to convince him (Dr. Acland) that when he is very miserable the taking a dose of mercury does not make him comfortable. He thought it was necessary that they should be cautious, and not throw overboard past experience. What was wanted was the effect—the true one—on the sick, and not the healthy.

Dr. BENNETT, in reply, said the question was this—Does the drug, or does it not, increase the quantity of bile? The committee had to determine the action of mercury as a cholagogue. Dr. Acland is more comfortable after taking blue pill, not because mercury increases the flow of bile. The main conclusions of the committee, he contended, were right. Experiments ought to be made on healthy men. But where were they to be obtained for such purposes? The action of purgatives accelerated the progress of bile into the intestines, and therefore produced bilious stools, but they did not increase the *secretion* of bile. As regarded large doses to dogs, the committee had given all kinds of doses.

At 11 o'clock the members reassembled in the different sections. The following papers were read:—

Section A.—Medicine.

Mr. J. LOCKHART CLARKE, "On Locomotor Ataxy primarily affecting the Spinal Cord, including Cases of Cerebral Origin."

Dr. SALTER, "On the Diagnosis of Dyspnœa."

Dr. CLIFFORD ALLBUTT (Leeds), "On the so-called Loss of Co-ordinating Motor Power in Locomotor Ataxy." The author inquired into the meaning of the word co-ordination, and combated the belief that any special faculty of co-ordination exists. Co-ordination, he contended, was a result of the perfect connexion and adaptation of parts. For instance, there is a co-ordination in each limb between the receptive surfaces and the instruments of motion. He went on to argue that the loss of co-ordination in locomotor ataxy was of the latter kind, and due to lesion of the posterior roots of the spinal nerves. The peculiar gait, therefore, was due to a want of perception of the true relation of external surfaces to the organism.

Dr. RUSSELL REYNOLDS, "On certain Affections of the Vaso-motor System of Nerves." The author commenced by describing a case in which the right radial pulse could be stopped by pressure on the lower cervical vertebræ, such pressure being accompanied by pain in the back, and an uneasy feeling in the right arm, but by no alteration in the left. He then proceeded to state that in numerous cases characterised by numbness, deadness, weakness, coldness, cramped feelings, tingling, and the like, occurring paroxysmally in the limbs, he had observed an irregularity, intermission, or weakness of the pulse in the affected parts, but no corresponding change in the circulation elsewhere. He inferred that such sensations were due to local disturbances of the circulation, and not to disease of the central nervous system, basing such inference upon the following grounds: the absence of indication of brain or spine disease; their paroxysmal occurrence; the mode of their distribution in the limbs; their association with obvious vascular changes; their cure by bromide of potassium; and their relation to the case which he described at the outset. Dr. Reynolds was of opinion that such symptoms resembled epileptic seisures, and that there were many other affections which might be explained in a similar manner, such as paroxysmal breathlessness, vomiting, dyspepsia, accumulations of flatus, some anginal attacks, vertigo, and temporary blindness and deafness; all of which may be frequently cured by the use of bromide of potassium.

Dr. PRINGLE, "On the Synchronism of Vaccinia and Variola."

Section B.—Physiology.

Dr. SANSOM, "Notes on the Anæsthetics of the Present Day."

Mr. J. T. CLOVER, "On the Administration of Nitrous Oxide as an Anæsthetic." He attributed the long delay between Sir Humphrey Davy's suggestion of the use of this gas to render operations painless to the absence of proper apparatus for making, storing, and administering the gas. He states that he has successfully given it to 387 cases, and to some five times at a sitting. No unfavourable result has occurred, except that a few of the cases recovered consciousness before the operation was completed. He described his apparatus as a modification of his chloroform inhaler, with which he obviates the accidental breathing of air along with the gas. To this is attributed the partial consciousness of the patient, which has hitherto made the use of the gas unsatisfactory. He considers that artificial respiration would be the proper remedy in case the gas had been too long inhaled.

Mr. C. J. FOX, "On the Preparation of Nitrous Oxide Gas."

Dr. W. H. O'LEARY, "Potential Energy of Muscle"; "Conversion of Heat into Muscular Force."

Section C.—Surgery.

Mr. SPENCER WELLS, "Improved Methods of exposing Vesico-Vaginal Fistula." The instruments used by Beaumont, Jobert, and others, before Marion Sims introduced his speculum, and Sims's instrument as altered by Simon, were shown and described. The apparatus of Ulrich of Vienna in its complete form, and the portions of it used by the author, were shown separately. The objections to fixing a speculum in any other way than upon the body of the patient were explained;

and Dr. Emmett's self-retaining speculum was exhibited. As the fulcrum of this instrument was fixed upon one hip, the side or semi-prone position is necessary during the operation; and the instrument, even when enlarged, does not answer well in large or fat women. An instrument was then shown which has been altered from Emmet's for the author by Messrs. Weiss. As the fulcrum is fixed upon the back, any position of the patient may be selected for operation, and the speculum may be so fixed in the vagina that it is not displaced by any movement of the patient. The author has operated with this instrument, and found that it enabled him to dispense almost entirely with any aid from an assistant.

Dr. J. MARION SIMS (Paris), "Speculum."

Dr. W. Stokes (Dublin), "Periosteal Preservation in Operative Surgery."

Dr. H. M. TUCKWELL (Oxford), "Remarks on Villous Tumour of the Rectum, and the Resemblance that it may bear in its Symptoms to Chronic Dysentery; illustrated by Two Cases."

Mr. VINCENT JACKSON (Wolverhampton): "Report of a Case in which the Right Arm was amputated at the Shoulder Joint, and the Scapula excised for Severe Injury of the Limb." The case was that of a man admitted into the Wolverhampton General Hospital in December, 1864, having previously been knocked down on the railway by the buffer of an engine, the wheel of which passed over his arm. The injuries were so severe that the removal of the limb at the shoulder joint, followed by excision of the scapula, offered the only chance of saving his life. The author drew particular attention to the fact that the scapula had been excised by sawing through the acromion process, thus saving the point of the shoulder; the first time, in fact, that this had been done, all previous excisions of the entire bone having involved a portion of the clavicle. There were only two other cases on record in which for injury of the limb a similar operation had been performed: one by Mr. Cumming, in 1808, for a gun-shot injury; and the second, also for a gun-shot injury, by Gaetani Bey, in 1841. The paper concluded by a reference to all the published cases in which the operation of amputation of the shoulder joint and excision of the scapula had been performed, whether for injury or for disease; and appended was a table with full particulars of these cases, and also of all cases in which the scapula had been excised alone.

Section E.—Public Medicine.

Dr. E. BALLARD, "On the Distribution of Sickness and Mortality through the Year, and on the Necessity which exists for a National Registration of Sickness." The basis of this paper is a record kept by Dr. Ballard during nine years, 1857-65, of 217,172 new cases of sickness, and 27,854 deaths, each of which he referred to the weeks, months, and quarter in which it occurred. The order of sickliness in quarters he finds to be spring (least sickly), next summer, winter, and autumn (most sickly). The order of fatality was spring (least fatal), and summer about equal to it, next autumn and winter (most fatal). Taking the months and the year, he finds the order of sickliness to be May (least sickly), next April, June, September, March, February, August, July, October, January, November, and December (most sickly). The order of fatality he finds to be September (least fatal), June, May, August, October, July, April, February, March, November, December, and January (most fatal). Dr. Ballard dwells upon the fact that the more closely this matter is examined the more is the agreement observed between the sickness and mortality of any period, and on this ground he urges the necessity for a national rrgistration of sickness, as well as of mortality.

The author then discussed the influence of some of the more important elements of weather upon the absolute amount of sickness. Taking six of the years the records of which were used for the previous paper, he compares, for quarters and months, the amount of new cases of sickness registered in opposite conditions of weather. The results he obtains are chiefly these:—1. That sickness prevailed more in those corresponding months and quarters in which the temperature was high than in those in which it was low. 2. That in the colder months of the year daily range of temperature has little influence, but in the warmer months it is more important than the temperature itself, a large decimal range being more injurious to public health than a low range. 3. That in the corresponding months and quarters in which the air was comparatively dry there was more sickness than when the air was moist. 4. That the sickness was least when there was most rainfall and a larger number of rainy days, the quantity of rain falling being more important than the number of days on which it fell. 5. That, on the whole, there was more sickness when the wind was from the south-west than when it blew from the north-east; and that, on the whole, high winds were associated with more sickness than winds of less force.

Dr. HARDWICKE, "On Public Mortuaries for Large Towns." The essential features of a public mortuary should be, first, a reception room—the mortuary proper—appropriated to those bodies deposited in a shell or coffin to await interment; and, secondly, a distinct, though adjoining, apartment for uncoffined bodies brought in dead, which are unknown, by the police, and in many instances have to await identification, or where post-mortem examinations have to be made in accordance with section 28 of the Sanitary Act, 1866. Dr. Hardwicke submitted plans and specifications, and suggestions were made that in the construction of these buildings convenience should be afforded for the custody of a hand hearse, a fever carriage, and for the supply of those disinfecting and deodorising materials which are required for the purposes of carrying out the Sanitary Act.

Dr. MAPOTHER, "The Appointment of District Physicians, to whom all Public Medical Functions should be entrusted." He advocated the appointment of highly qualified physicians for cities and rural districts, who should alone undertake public duties, such as superintendence of death registrations and the publication of them in a more reliable and detailed manner; the giving evidence in all cases before the coroner, or rather the magistrates, to whom he would refer the duties of that functionary; acting as skilled witness in all courts of justice, and as medical officers of health. They should be paid out of the county rates and Consolidated Fund at the rate of £100 yearly per 35,000 of the population of the district, with travelling expenses, and he estimated that so much is at present paid for the irregular performance of such duties. The present medical coroners should have the option of taking the office, but all future appointments should be made after competitive examination.

Professor LAYCOCK, "Suggestions for rendering Medico-Mental Science available to the better Administration of Justice, and the more effectual Prevention of Lunacy and Crime." The author, while admitting that medical education is defective as to the practical relations of medico-mental science, proceeded to show that the acknowledged defects in the administration of justice in all matters relating to legal responsibility and capacity could only be thoroughly remedied by bringing the principles and procedures of the law into harmony with modern mental science. Some of those now current date from a very remote antiquity; others have no higher origin than precedents founded on popular prejudices. Even the most recent exposition of the law as to criminal responsibility, by the twelve Judges in 1843, had, as its chief foundation, a confused charge of Chief Justice Hale, the last judicial persecutor of witches. The same defect runs through the administration of justice in respect to the restraint and punishment of criminals, many of whom are incorrigible imbeciles, so that the whole of our primitive system is little better than a groping in the dark, because the scientific means available to the reformation of criminals and the prevention of lunacy and crime are lost sight of. Looking at the magnitude of the questions involved, Dr. Laycock argued that nothing short of a thorough public inquiry by competent persons into the entire administration of of justice in its relations to modern or medico-mental science would render the latter duly available to the needs of society, and remedy obvious defects.

In the afternoon, at 4 o'clock, the last general meeting was held in the Divinity School.

Dr. ROBERTS brought up the report of the Committee appointed to inquire into the mode of election to, and the constitution of, the Council. The Committee met on Friday morning, the 7th inst. There were present Dr. Sibson, Dr. Gairdner, and Dr. Roberts, with Dr. Falconer, *ex officio*. After discussion, it was unanimously agreed as follows:—

"1. That the Committee of Council be empowered to propose to the first general meeting, at each annual meeting, a list of persons to serve on the Council for the ensuing year from among the members who do not reside in localities where branches exist."

"2. That the number of persons so proposed shall be in the proportion, as nearly as possible, of one to every twenty such members."

"3. That it be permitted to members residing in localities where no branches exist to nominate (if they so choose) representatives to serve in the Council in the proportion of one

to twenty of their number, in which case the Committee of Council shall not nominate for such locality."

A short discussion ensued, and it was shown that the regulation would apply to Scotland and Ireland rather than to England.

Dr. ROBERTS proposed, Dr. Gairdner seconded, and it was resolved—"That the report be adopted, and referred to the Committee of Council for execution."

Other reports were also read and adopted. Various votes of thanks were then accorded to the presidents and secretaries of sections, the local secretaries, and to Mr. Hart for the editing of the Society's *Journal*. Dr. Acland stated that he could not sufficiently express how much the local secretaries had done; especially was this the case with Mr. Chapman, who though not a medical man, had sacrificed all his time, absolutely without stint, to make all the visitors comfortable. We may assure Mr. Chapman that his efforts are warmly appreciated.

Dr. FARR moved that the thanks of the meeting be given to the distinguished visitors from America, and that the Council be instructed to appoint a deputation to reciprocate in America the compliment paid them in England.

This was carried with acclamation.

A petition, signed by the Chairman on behalf of the meeting, was ordered to be presented to the House of Commons in favour of the improvement of secondary education.

Dr. STOKES then said: I have the last act to perform in a meeting which I will not attempt to designate in words, and the object I have in view in rising is to offer our thanks to the President. Looking to the nature of that gentleman's mind, I feel it will be more grateful to him if his qualities are passed over without comment, and especially from one who like me has received the precious gift of his friendship. I shall, therefore, only move, "That the warmest acknowledgment of the gratitude of the Association are due, and are hereby given, to the President for the services he has rendered to the Association."

Dr. GAIRDNER seconded the motion in a speech very complimentary to Dr. Acland.

Dr. ACLAND said they must all feel that their meeting in Oxford had been a very important and serious one. They had enjoyed great opportunities, from their intercourse with a large number of great men, whose example and work he should like to approach. Thanks were due from him to them, for the work of the Association produces its impress on its agents, and he felt that from the intercourse he had enjoyed with them he had come to know, amongst other things, the great value of, and what is really meant by, professional intercourse. His desire was to find out in what way he could turn his experience to the good account of the Association and its members.

He then left the chair, and so ended the most successful meeting, both scientifically and socially, the British Medical Association has yet held. The many and pleasant reminiscences of the Oxford meeting will not readily be dimmed or effaced from the minds and hearts of those who were present at it.

THE SEAMEN'S HOSPITAL SOCIETY.

THE *Dreadnought* is now empty, and undergoing extensive repairs, the Society having for the time reduced their number of patients, and transferred them, with the medical staff, to the *Belleisle*, which ship did good service in the Thames during the epidemic of cholera two years ago. The *Belleisle* will accommodate about ninety patients, and is a very fair specimen of navy hulks used for the reception of the sick and wounded in time of war. It would, however, be a subject of great regret if the repairs now proceeding on board the *Dreadnought* are likely to lead to a renewal of her lease of existence as an hospital ship. Several years have now elapsed since the Committee of the Society, acting upon the advice of their medical officers, determined to close the floating establishment as soon as a home on shore could be found. It needs no sophistry, and but a very slight acquaintance with the laws of hygiene, to show that this determination, though tardy, was wise, and all those interested in the welfare of our mercantile marine were glad to hear of the projected change, albeit at the sacrifice of the largest floating hospital extant. But to what extent have the Committee of the Society advanced since the shore scheme was broached? They have expended a large sum in the purchase of a site close to the water's edge, and they have petitioned Parliament for money or for a certain vacant wing of Greenwich Hospital, hitherto without success. They cannot build without money, and it is currently reported that no subscriptions will be obtained from shipowners as long as the wards of Greenwich Hospital remain as now, a reproach and a disgrace to the Board of Admiralty. There is now no doubt that the Society should have accepted the quarter originally offered by the Government, and have trusted to their own perseverance and the influence of public opinion for the eventual result; but, under present circumstances, it will be to the advantage of the Society's patients, and the Society itself, that, when the naval medical school is established at Greenwich Hospital, our sick sailors should be received within the walls of that institution for the purpose of affording clinical instruction to the medical officers of the Royal Navy. Such an arrangement, as we have before intimated, would tend greatly to the advantage of that class who form the special clients of this very useful Society.

Correspondence.

"Audi alteram partem."

THE TRIAL OF SPEAR *VERSUS* DOIDGE.

To the Editor of THE LANCET.

SIR,—The short account which appeared in a late impression of THE LANCET of the case of Spear *v.* Doidge is likely to convey a wrong impression as to the facts of the case. Having been present throughout the whole of the trial, perhaps you will be good enough to read, and, if you think proper, publish, in justice to Mr. Doidge, my summary of the trial.

Seven witnesses were called for the plaintiff, *all*, be it observed, members of the same family, who swore to the facts that the arm was placed in a straight position, and ordered to be continually kept so, and that no sling was used. They not only swore to these alleged facts in the same identical words, but each individual illustrated it on the question (which was generally the final one) being put by Mr. Cole, the plaintiff's counsel, "Now, in what position did Mr. Doidge put the arm?" "Straight down by his side, like this," each in rotation throwing his or her extended arm straight on the witness-box, and this, be it observed, although the majority of them were not present when Mr. Doidge reduced the dislocation, &c.

We next come to the evidence of Messrs. Whipple and Fox, surgeons, of Plymouth, and Mr. Leamon, of Tavistock, who stated that, assuming the evidence of and for the plaintiff to be true, he had not been treated skilfully.

But then the defendant was placed in the box, and swore distinctly that there was a fracture or the ulna, with dislocation of the radius; that he reduced the dislocation, and attended the fracture, and left the man with his forearm in a sling, and at right angles with the upper arm. In his evidence he was supported as to facts by his pupil, Mr. Griffiths, and also by Mr. Good, surgeon, of Launceston; and his surgical treatment of the case was declared by Mr. Delagarde, of Exeter, and Mr. Henry Greenway, of Plymouth, to have been what they would have adopted under similar circumstances.

I have nothing more to add than that I was rather startled when I heard the verdict and the award of the jury, damages £162 10*s.*; for it struck me at once that it ought either to have been a much larger sum, or that the verdict should have been for the defendant. We are not very far from Cornwall, and it reminded me of the finding of a Cornish jury in a criminal case, "We find the prisoner not guilty, my Lord, but recommend him not to do it again."

I am, Sir, your obedient servant,

Lewdown, Exeter, August 10th, 1868. JOHN H. WILLIS.

To the Editor of THE LANCET.

SIR,—I beg to enclose you a rough sketch of my case:—On the 6th of March, 1867, John Spear, a small farmer, met with an accident in the following way. He was driving his horses in the threshing machine, and whilst greasing the cog-wheel he had his upper arm caught by the advancing arm of the centre, which moves on its own axis, and compressed his

forearm against the fixed arm below, thereby causing the following mischief: fracture of the ulna close to the elbow, dislocation of the radius forwards, with probable fracture of the shaft, though, from the great amount of swelling and extreme tenderness, this was difficult to be perfectly established; great bruising of the soft parts above and below the elbow; partial rupture of the ulna nerve, and laceration of the median vein, with profuse hæmorrhage; great swelling and extreme tenderness all around the parts. Treatment: reduction of fracture and dislocation, splints being applied exteriorly and interiorly, and pressure applied over the radius by a soft pad and curved splint; the arm placed in a sling at right angles.

To understand the remainder, I must tell you his peculiar temperament. His nervous organisation is extremely sensitive; in fact, himself and his two brothers, who have come under my notice, two from severe injury, and another without obvious *physical* cause, have exhibited hyperæsthesia in its highest degree—one brother taking nearly twelve months before he could depend upon walking from nervous sensibility of the legs, and the other, after a severe injury to his fingers from the kick of a horse, exhibited such an enormous sensibility to pain as to be quite disproportionate to the amount of injury. The case has always been, in my judgment, an exact parallel of that of Sir Robert Peel.

I left the man between 5 and 6 P.M., after putting his arm to rights. About midnight a messenger came in great haste to summon me to his master, to take off the splints, &c., saying he should go mad if I did not. I found him in a state of extreme nervous excitement and irritative fever from intense pain. I told him the risk attending the removal of the splints, and remained with him for two hours, endeavouring by every possible means to obviate that necessity, but failed in procuring any relief. I then, at his urgent request, removed the external splint, leaving a few rolls of bandage loosely around the forearm, which he still further loosened after I left him. Evaporating lotions, poultices of various descriptions, aconite liniment, subcutaneous injections of morphia, baths, &c., were used for the purpose of affording relief and reducing the swelling. He was scarcely ever free from pain; at times it was most intense.

About three weeks after the injury he was seized by severe neuralgia, first in the shoulder of the affected side, which still further itensified that of the elbow; it then travelled across his chest, causing extreme dyspnœa, with intermitting pulse, great depression, and extreme exhaustion, so much as to place his life in jeopardy for a fortnight—a fatal result being obviated only by great watchfulness, the free exhibition of stimulants, and nutrition (with some of which I supplied him out of my own pocket).

About ten days after the first removal of the splint I applied it a second time, but he removed it himself, from the extreme pain it produced, after my departure. The neuralgia at last settled in his legs, from which he was suffering when I saw him last, nearly three months after the injury.

Mr. Good, of Launceston, saw him with me during the time of his greatest suffering, who told him he thought he had a better arm than he could expect, and to whom he expressed his entire satisfaction with everything that had been done for him.

Nearly three months after the injury, Mr. Leamon, of Tavistock, was introduced by Spear's brother without the patient's knowledge.

That the radius was thoroughly reduced is proved by the fact that the arm was placed at right angles and hung in a sling, and that for eighteen or twenty days he could raise himself in bed on his bent elbow without difficulty. About that time he began to find the motion was infringed on, but owing to the extreme tenderness and swelling, there was no alteration in the appearance of the joint; and owing to the fact that the slightest amount of manipulation bringing on the most intense pain, I could only surmise that a great deal of this difficulty was dependent on a second displacement of the radius forwards; but on reapplying the splint he found it impossible to wear it, and was compelled again to remove it. I explained to him, in the presence of his wife, the condition of the injury, and the causes and consequences of such displacement. The injustice of the thing consists in making me responsible for the man's peculiar temperament. Both Mr. De La Garde and Mr. Greenway agreed with me in thinking that a second reduction would have induced such an amount of increased inflammatory action as would have probably produced diffused suppuration and loss of the limb, or even death.

I am, Sir, yours obediently,

Lifton, August 11th, 1868. J. G. DOIDGE.

THE SANITARY CONDITION OF GUILDFORD.

To the Editor of THE LANCET.

SIR,—I have been reading Mr. Eager's account of the Guildford scarlatina epidemic in your paper of last week. He tells us that the seizures have been about 3 per cent. of the population, and the death-rate about 5 per cent. of the seizures. There has therefore been about one death in every 666 of the population. Let me suppose, for the comparison I am about to make, that the epidemic has been spread over three months. In truth, as may be inferred from Mr. Taylor's letter on the same subject, this supposition does injustice to the virulence of the outbreak.

Now, the Registrar-General in his last quarterly report informs us that there were 352 deaths from scarlatina in London in the three months ending midsummer last. This I find is at the rate of one death in every 8500 of the population.

Here is Guildford then suffering at this moment from scarlet fever of *more than twelve times the intensity* of that which has been prevailing in the metropolis. London is bad enough, and we are all very glad just now to leave it, but I for one should prefer to take Mrs. C. and the children this autumn to some other place on the beautiful Surrey hills than Guildford; and I can well believe with Mr. Eager that "a very prejudicial influence will be exerted on this flourishing and fast improving town" when the public understands from his own figures at what rate scarlatina is now (following the lead of typhoid fever last year) slaying its inhabitants.

Perhaps it is to the *argumentum ad crumenam* that sanitary people must look to have their way at last. Filth and epidemics will be found not to pay.

I am, Sir, your obedient servant,

London, Aug. 17th, 1868. COCKER.

THE ABYSSINIAN PROMOTIONS.

THE following is the part of the General Order, dated Horse Guards, August 14th, which relates to the Medical Department of the Army:—

"That the undermentioned medical officers be promoted to the ranks specified, in consideration of their valuable services with the Abyssinian Field Force,—viz., Deputy Inspector-General of Hospitals Samuel Currie, M.D., C.B., to be Inspector-General of Hospitals; Staff Surgeon-Major Thomas Guy, M.D., to be Deputy-Inspector of Hospitals; Surgeon Charles Dodgson Madden, 4th Foot, Surgeon Neil Henry Stewart, 3rd Dragoon Guards, and Surgeon James Sinclair, 33rd Foot, to be Surgeons-Major.

"By command,

"(Signed) W. PAULET, Adjutant-General."

In the Naval Service, Surgeon J. N. Dick is promoted to the rank of Staff Surgeon.

Surgeon-major Edward Mahaffy, M.D., Bombay Army, is also gazetted a C.B.

EDINBURGH.

(FROM OUR OWN CORRESPONDENT.)

A GAY assemblage met on the 1st inst. to witness the University graduation ceremony. As has of late years been usual, the "capping" took place in the Assembly Hall, the accommodation within the University Hall being insufficient for so popular a meeting. Professor Christison, who has recently been appointed Vice-Chancellor, would have presided, but was unfortunately prevented being present by illness. In his absence, the duties of chairman were performed by Professor Kelland. The office of Promoter of the Faculty of Medicine was on this occasion filled by Sir James Simpson. The small number of the medical profession present was the subject of remark. The degree of Doctor of Medicine was conferred, under the old statute, on eleven gentlemen, each of whom presented a thesis, but the only one commended was that of Dr. Frederick Page, England, "On Isolation and Contagious Diseases." The degree of Doctor of Medicine, under the new statutes, was conferred on ten gentlemen. These had all given in their dissertations when they took the degrees of M.B. and C.M.; three of them had taken these degrees in 1865, and

seven in 1866. The number taking the M.D. degree under the new statutes is looked to with some interest, for there is a feeling amongst many professional men that the number in future taking this degree will diminish, the majority of graduates being content with that of Bachelor of Medicine and Master of Surgery. It has even been mooted whether those holding these degrees are any more entitled to style themselves "Doctor" than those who hold the College licence.

The graduates on whom the double degree of M.B. and C.M. was conferred numbered forty-six, whilst nine obtained the degree of M.B. On this occasion these gentlemen did not present dissertations, and in future it is understood that the candidates for the M.D. degree will send in theses. Of these fifty-five gentlemen, David Ferrier (M.A. Aber.), Scotland, and and James Alexander Russell (M.A. Edin.), Scotland, passed their examination with first-class honours; and Charles Stewart Clouston (Scotland), James Wilkie Wurman (England), and Robert Dick (Scotland), passed with second-class honours. Your correspondent has alluded on previous graduation occasions to the pre-eminence of the English students in gaining commendation for their dissertations; but it is noteworthy that they do not hold the same distinguished position on this occasion, when excellence in the subjects of examination classed the student. Sir James Simpson afterwards addressed the graduates in his usual eloquent and earnest way. The address was replete with good advice as to their conduct to themselves and to their patients, and embraced allusions to the past as well as the future, and to the necessity for a well-instructed physician being conversant, through their works, with the great leading spirits of the past, but that henceforth their diseased fellow-men were to be their great volumes of study. He afterwards indulged in the visionary view of what the future of medicine might be expected to be when our acquaintance with pathological chemistry was complete, and, after a suitable conclusion, ended amidst loud applause.

Edinburgh, August, 1868.

GLASGOW.

(FROM OUR OWN CORRESPONDENT.)

IT is well we have the University election to enliven us at this dull season of the year. The constituency, it is calculated, will amount to about 3500, of whom upwards of 2000 are medical graduates. They are so scattered that unity of action in this, the first election, was unattainable; but when once collected, as is now being done, into a homogenous body, their influence on future elections, if properly directed, may be all powerful. The constituency have been thoroughly, but quietly, canvassed, and if we can believe what emanates from the rival committees a very large proportion, more than two-thirds of the whole, must be pledged. So indifferent are many to the great privilege now bestowed upon them that I firmly believe they will throw it away, rather than pay the registration fee of £1. Either Mr. Gordon or Mr. Moncreiff will make a good member; there is little to choose between them except politics. Whichever of them is returned will be forced to take an active part in medical politics.

Glasgow, Aug. 17th, 1868.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 13th inst.:—

Bedford, Charles Frederick, Sleaford, Lincolnshire.
Hadley, George Percival, Birmingham.
White, John Campbell, Westminster.
Whitefoord, Caleb Charles, St. John's-terrace.

The following gentlemen also on the same day passed their first examination:—

Duke, Bernard, King's College Hospital.
Lacey, Thomas Warner, Guy's Hospital.
Lucas, Robert Harvey, Middlesex Hospital.
Marsh, Walter Alfred, Guy's Hospital.
Taylor, Joseph Ogilvie, University of Edinburgh.

PROSECUTION OF AN UNQUALIFIED MEDICAL PRACTITIONER AT OLDBURY.—At the Hales Owen petty sessions, on Tuesday, the 11th, before Mr. S. Hanbury and Major Lea Smith, Thomas Holland, of Oldbury, was charged, under the 27th, 36th, and 40th sections of the Medical Act of 1858, with having wilfully and falsely pretended to be, and with having taken and used the name or title of a surgeon, implying that he was registered under the Act; and also with having acted as surgeon to a Friendly Society for affording mutual relief in sickness, contrary to the said Act. In opening the first case, Mr. Shakespeare said Mr. Holland was a person who had practised in Oldbury for many years without any interference from the medical men of the place, but having lately placed himself in an antagonistic position to them in the club question they felt it their duty to take the present proceedings to protect their professional interests. Fanny Cleaver deposed that Mr. Holland attended a child of hers in June last, who died of convulsions, and that he gave her a certificate of death signed "Thomas Holland, surgeon," which she transmitted to the registrar of births and deaths. This certificate was produced by the deputy-registrar, the registrar (his father) having died since the granting of the summons. Mr. Parish, the deputy-registrar, knew Mr. Holland's handwriting, and the certificate produced was his. Mr. Jackson, for the defence, raised a technical objection as to the absence of Mr. Holland's name from the medical register being proof of his not being qualified. The Bench overruled the objection, and after a short consultation they announced that they considered the charged proved, and imposed a fine of £5. The next charge was for acting as surgeon to the "Miner's Refuge Friendly Society," held at the house of Mrs. Clifton. Joseph Matthews, secretary to the society, deposed that Mr. Holland had acted as surgeon for many years, and that he was re-elected every six months. He produced the minute-book containing the last entry of such re-election. This charge was also considered proved, and the same fine (£5) was imposed. There were nine other cases against the defendant, but these were withdrawn, as the object of the prosecution was attained by the judgment in the former cases.

ALLEGED ILL-TREATMENT AT ST. PANCRAS WORKHOUSE.—An inquest was held by Dr. Lankester, on Monday last, on the body of John Franklin, aged seventy-one, who had cut his throat through alleged ill-treatment on the part of the medical officer, and starvation, in the St. Pancras Workhouse. Deceased was a commercial traveller, who had been ill for twelve months. A fortnight before his death he received an order for the workhouse, with the view of being admitted into the infirmary. But he was ordered to the old men's ward, where he had ordinary diet, which he could not eat. He said he was starved in the "house," and might just as well starve at home, or cut his throat, which he did a few days afterwards. It appears that he was labouring under disease of the lungs, and cancer of the liver and kidney. There was an effusion of blood upon the brain, which was considered to be the cause of his delirium. The jury, having received a promise from a guardian present that the charge against the officers should be fully investigated, returned a verdict "That deceased committed suicide while in an unsound state of mind."

YELLOW FEVER prevails in Vera Cruz.

DR. GEORGE BODINGTON, who issued an address in 1859, has again come forward as a candidate for Birmingham. He styles his political views Radical Conservative.

THE BRITISH ASSOCIATION.—Amongst the distinguished foreigners who are expected to take an active part in the proceedings of the British Association, are Dr. Appen (Geneva), Dr. Béhier (Paris), Dr. Broca (Paris), Dr. Blasius (Halle), Dr. Caius (Leipsic), Count Castracani (Rome), M. Favre (Lyons), Professor Gross (United States), Dr. Heynsius (Leyden), Dr. Koch (Berlin), M. Lartet (Paris), the Baron Madler (Col Moulinie, Geneva), Prof. Nilsson, Chevalier Negri, Dr. Radikopr (Munich), Padre Secchi (Rome), Professor Thury (Geneva), Dr. Vogt (Geneva), Prof. Vambery (Pesth), Prof. Weddell (Poictiers), Prof. Walterhausen, Dr. Zaeger, &c.

AN examination of candidates for admission to the University of Oxford as unattached students will be held at Oxford on Thursday, the 15th of October.

A HANDSOME silver goblet was presented to J. H. Elliott, Esq., M.R.C.S., of Andover, by the members of one of the Courts of the Ancient Order of Foresters on Monday last, at a public dinner in acknowledgment of his services to the club during the time he has held the office of Surgeon in connexion with it. The testimonial was accompanied by an illuminated address on vellum, and contained the signatures of 270 subscribers, including the two present members and the mayor of the town.

MEDICAL APPOINTMENTS.

ASHLEY, J., M.R.C.S.E., has been appointed Medical Officer for the Bitton District of the Keynsham Union, Somersetshire, vice T. W. Fryer, M.R.C.S.E.

BIGGS, R., M.R.C.S.E., has been appointed Public Vaccinator for the City and Borough of Bath.

BIRNS, W. H., M.R.C.S.E., has been appointed Resident Medical Officer to Trinity College, Glenalmond, Perthshire, vice William Ewart, M.D., resigned.

CHILD, G. W., M.D., has been appointed Lecturer on Botany at St. George's Hospital Medical School, vice Lawson, appointed Sherardian Professor of Botany in the University of Oxford.

DICKSON, A., M.D., has been appointed Professor of Botany in the University of Glasgow, vice Dr. G. A. W. Arnott, deceased.

DOUGLAS, T. S., M.R.C.S.E., has been appointed Public Vaccinator for the Workington District of the Cockermouth Union, Cumberland.

EDWARDS, H., M.R.C.S.E., has been reappointed Medical Officer for the Alrewas District of the Lichfield Union, Staffordshire.

HIME, Dr. T. W., has been elected a Medical Officer to the Sheffield Hospital for Women.

MACDONNELL, Dr. W., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Feakle Dispensary District of the Scariff Union, vice T. Burke, M.D., deceased.

M'NICOL, J. C., M.D., has been appointed Resident Assistant Medical Officer at the Workhouse of the West Derby Union, Lancashire, vice W. G. Laidlaw, M.B., resigned.

MORRIS, Mr. D. E., has been appointed Assistant Medical Officer to the North Wales Counties Lunatic Asylum, Denbigh, vice J. C. Morris, L.F.P. & S. Glas., resigned.

NEWINGTON, R. S., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Parish of Goudhurst, in the Cranbrook Union, Kent, vice S. W. Newington, M.R.C.S.E., deceased.

OWENS, E. M., L.R.C.P.Ed., has been appointed Medical Officer for District No. 5 and the Workhouse of the Maidstone Union, vice P. H. Stokoe, M.D., resigned.

PALMER, C., L.R.C.P.Ed., has been appointed Surgeon to the Rolleston Friendly Society, Barton-under-Needwood, vice E. H. Day, M.B., deceased.

PEARSON, J., M.D., has been appointed Public Vaccinator for the Maryport District of the Cockermouth Union.

PHILLIPS, E. E., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Bishop's Lydeard District (No. 4) of the Taunton Union, vice S. Elmes, L.K.Q.C.P.I., resigned.

REYNOLDS, P. B., L.K.Q.C.P.I., has been appointed Medical Officer for the Ballindine Dispensary District of the Claremorris, Union, Co. Mayo.

ROE, R. L., L.R.C.S.I., has been appointed Surgeon to the Laughtea Slate Quarries, Killaloe, Co. Clare, vice T. Burke, M.D., deceased.

SAMPSON, F. C., L.R.C.P.Ed., has been appointed Medical Officer to the Scariff Union Workhouse, vice T. Burke, M.D., deceased.

SANGSTER, C., M.R.C.S.E., has been appointed House-Surgeon to the Whitehaven and West Cumberland Infirmary, vice R. C. Gowing, M.R.C.S.E., appointed Medical Officer for District No. 1 and the Workhouse of the Daventry Union.

SEARLE, G. C., M.R.C.S.E., has been appointed Resident Medical Officer to the Dudley Dispensary, vice J. Watkins, resigned.

SMITH, Mr. J., has been appointed Medical Officer for Tottington No. 2 District of the Bury Union, Lancashire, vice Allan A. M'Clure, L.R.C.P.Ed., resigned.

SPENCER, Dr., has been appointed Medical Officer for District No. 2 of the Oxford Lying-in Institution, vice F. W. Clarke, M.R.C.S.E., appointed Medical Officer to the Bury Incorporation of the Poor.

TWEDDLE, J., M.R.C.S.E., has been appointed Public Vaccinator for the Keswick District of the Cockermouth Union.

Births, Marriages, and Deaths.

BIRTHS.

BANTOCK.—On the 7th inst., at Cornwall-road, Westbourne-park, the wife of Dr. G. Granville Bantock, of a son.

BARTLEET.—On the 10th inst., at Birmingham, the wife of T. H. Bartleet, M.B., of a daughter.

BENNETT.—On the 13th inst., at College House, Hammersmith, the wife of C. H. Bennett, M.D., of a daughter.

JAMES.—On the 11th inst., at Perry-vale, Sydenham, the wife of A. James, M.D., of a son.

PEARCE.—On the 11th ult., at Trewyn, Dulwich, the wife of J. C. Pearce, M.R.C.S.E., of a son.

PYLE.—On the 10th inst., at Bishopwearmouth, the wife of T. T. Pyle, M.D., of a son.

TOLLER.—On the 11th inst., Mrs. Toller, of Wotton, near Gloucester, of a son.

WILSON.—On the 17th inst., at Croft Head, Littleborough, the wife of H. S. Wilson, M.D., of a son.

MARRIAGES.

KIDD—LYLE.—On the 14th inst., at Trinity Church, Archibald Napier Kidd, M.D., F.R.C.S.I., son of the late William Lodge Kidd, M.D., of Armagh, to Laura Isabella, second daughter of Andrew Lyle, Esq., of Newington, Belfast.

MYLES—SAUNDERS.—On the 29th ult., at Kilmurray Church, Co. Kerry, George Myles, L.R.C.P.Ed., of Limerick, to Marion, second daughter of Wm. M. Sanders, of Carker House, Co. Kerry.

THURSFIELD—HEATH.—On the 10th inst., at Wolverley, Worcestershire, Thomas W. Thursfield, M.D., of Leamington, to Alice, only daughter of Matthew Heath, Esq., of Wolverley.

DEATHS.

ADAMS.—On the 8th inst., Joseph Adams, L.F.P. & S. Glas., of Davenham, Cheshire, aged 47.

CHITTENDEN.—On the 13th inst., at Faversham, Kent, John Franks Chittenden, M.D., aged 62.

CRISP.—On the 9th inst., John Crisp, Surgeon, of Wheathampstead, Herts, aged 63.

GAYE.—On the 14th inst., W. T. Gaye, M.B., of Williton, Somersetshire, aged 45.

KEARNEY.—On the 10th ult., John Kearney, M.R.C.S.E., of Ballina-park, Co. Wicklow.

SMITH.—On the 7th inst., Dr. F. Smith, of Pooley-bridge, Penrith, Cumberland, formerly of Ambleside, aged 72.

UNIVERSITY OF LONDON.

FIRST B.Sc. & PRELIMINARY M.B. HONOURS EXAMINATIONS, 1868.

CHEMISTRY AND NATURAL PHILOSOPHY.

Wednesday, Aug. 5.

NATURAL PHILOSOPHY.

Examiners—Professor CLIFTON, M.A., and Professor G. CAREY FOSTER, B.A.

1. Describe Daniell's pyrometer, and the mode of using it. Obtain a relation between the indications of the scale and the temperature, pointing out the experimental data required, and the assumptions made.

2. Assuming the absolute expansion of mercury to be known, explain fully the method of obtaining the absolute expansion of other liquids by means of the weight thermometer.

A fine glass tube of uniform bore has a bulb of the same glass attached at one end, and 50 grammes of mercury are introduced into the bulb and part of the tube. When the whole is cooled to 0° c., the tube is marked at the top of the mercury. The whole is now heated to 50° c., and the position of the top of the mercurial column is marked; and the same is done when the temperature of the whole is 100° c. Upon again being cooled to zero, the distance between the first and second marks is found to be 76 mm., and the distance between the first and third marks is 153·05 mm. What do these observations indicate? Obtain from them the approximate value of the mean coefficient of cubical expansion of the capacity of the bulb and tube.

(Mean coefficient of absolute expansion of mercury between 0° and 50° c. = 0·000·8027.

Mean coefficient of absolute expansion of mercury between 0° and 100° c. = 0·000·8153.)

3. When an alloy of lead and tin is gradually heated from the ordinary temperature of the air to the melting point of lead, describe what takes place. How are the phenomena altered by a change in the proportions of lead and tin in the alloy? Give some explanation of these phenomena, with evidence in support of it.

4. Describe and explain a method of determining the tension of aqueous vapour at temperatures below 0° c. If the water employed in the process become solid, does this affect the tension of the vapour obtained?

5. A piece of copper is joined to an exactly equal and similar piece of tin, so as to form a cube, of which each edge is 10 cm., and the surface is covered with lampblack. If this cube be now heated to 100° c., and allowed to cool, in a space of constant temperature, until its temperature becomes 50° c., and heat be supposed to pass instantaneously throughout the whole mass, so that it is always of the same temperature throughout, determine the quantity of heat which has passed from one metal to the other.

(Specific gravity of copper = 8·88.
" " tin ... = 7·29.
Specific heat of copper ... = 0·095.
" " tin ... = 0·056.)

6. Describe the method employed by Favre and Silbermann for determining the heat of combustion of bodies in oxygen. If one gramme of hydrogen, by burning in oxygen, produce sufficient heat to raise 34·462 kilogrammes of water from 0° to 1° c., and the unit of current electricity be that which decomposes one gramme of water, determine the mechanical equivalent of electricity in metre-kilogrammes, the heat produced by the current being neglected.

7. State the nature of the apparatus employed, and describe its arrangement, in investigating the thermal spectrum from any source of heat. Give some account of the thermal spectrum of the sun, and its relation to the luminous spectrum.

8. Describe some experiments showing that radiant heat can be plane-polarised. What is supposed to be the nature of such plane-polarised heat?

9. Explain the method of determining the magnetic intensity at any place and time.

To Correspondents.

COOKING IN SICK-ROOMS.

THE value of the Norwegian cooking boxes has again been brought under public notice, but this time in relation to the wants of the sick-room. The principle is now generally understood. The thing to be cooked is heated up to the boiling-point, and then placed in a box lined with a thick layer of felt, the heat not being allowed to escape at all; the cooking goes on during the time the apparatus is closed. It is suggested that the nurse and doctor may be quite independent of the cook; but this aside, the Norwegian boxes are clearly useful, if not for actual cooking, at any rate for keeping broths, beef-tea, and the like, warm for any length of time. But even beef-tea may be made quite readily with it: the meat is chopped up into small pieces, placed in one of the small tins with closely fitting lids, immersed in the large tin (nearly filled with water), which fits immediately into the box itself. This is then placed under a gas-burner, and made to boil; it is then placed into the felt-lined box, which is fastened down for three hours. At the end of that time the innermost tin which contained the meat is found to hold pure essence of beef, chicken, or its other contents; the advantage being that there is no infusing water needed.

W. W. P., (Sutton Bonnington.)—The charges appear to us strictly fair and moderate.

THE letter of *Disperses* on "Lead Colic" shall be published next week.

"GOVERNMENT NO GOOD SAMARITAN."

THE statement contained in a paragraph in THE LANCET of the 8th instant, with reference to a boy with compound fracture of the thigh, sustained immediately in front of the Herbert Hospital, Woolwich, having been refused admission into that hospital by the military governor because he was a civilian, and having died on the road to Guy's Hospital, is happily incorrect in the latter particular, as we have ascertained that the boy is at present in Guy's Hospital, and doing well. We have also been informed that at the time of the accident he was taken into one of the surgical wards of the Herbert Hospital, and remained there from 7.30 P.M. till 10 P.M., and received wine and every attention during his stay in that establishment.

Dr. Henry Bennet's article on "Hysterical Vomiting" is in the hands of the printer.

PROFESSIONAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—The last number of your journal contains a letter from Dr. Bagshawe, tendering me a "full apology and retraction" for his first letter (28th March) to you, also for the anonymous letter which he forwarded to Mr. Griffith, at the same time regretting its unauthorised publicity by that person.

Having now clearly established my case, I accept Dr. Bagshawe's apology, possessing no desire to press matters further against him, although the attempt to injure me was of the most dangerous character; indeed there has never been a more wanton and unfounded outrage committed.

I deem it but fair, however, to state that I do *not* entirely blame Dr. Bagshawe, believing that he was simply the "catspaw" of Mr. Griffith and his clique.

Further comment from me is unnecessary; but myself, and doubtless the profession, expect from you such an expression of your disapprobation of the course pursued "by Mr. Griffith and the other writers on this subject" as will satisfy them of the utter want of veracity (proved) of the assertions made, and teach them to pause before they again publish statements at variance with truth, and about one whose only fault was being professionally *de trop*.

I am, Sir, yours, &c.,

August 18th, 1868. P. CHAS. DUNCAN, M.D.

P.S.—Dr. Bagshawe has paid my expenses.

*** In justice to Dr. Duncan, we may state, after a careful investigation of the entire matter, and from documentary evidence in our possession, that the charges brought against him were unfounded. Dr. Bagshawe has now fully retracted all his statements, and made an ample apology for his conduct; nothing less would have been satisfactory. For the future he will, no doubt, be more careful of traducing a professional brother.—ED. L.

An Old Subscriber, by looking at the first part of the answer to which he refers will find a reply to his question. No matter what the case may be, it should be handed over to the usual medical attendant, by the gentleman called in in his absence, as soon as possible. The answer in the last LANCET applied to a case in which the injured person had no medical attendant in particular. It was intended to do away with misunderstandings which sometimes arise when two or more practitioners are called to a case of accident. It has been assumed in some instances that the gentleman first *sent* for should have the case handed over to him on his appearance. This is an error; the one who first arrives at the case should take charge of it.

L. A., (St. John's-wood.)—We do not insert reports of cases except from medical practitioners.

A Medical Student will find an answer in the following note.

ETHER AND ETHERISED COD-LIVER OIL IN THE TREATMENT OF PHTHISIS.

To the Editor of THE LANCET.

SIR,—Will you allow me to reply in your columns to the many inquiries addressed to me respecting the composition of the etherised cod-liver oil?

I have three formulæ:—

No. 1 consists of ten minims of pure ether (æther purus, P.B.) in two fluid drachms of cod-liver oil.

Nos. 2 and 3 consist respectively of fifteen and twenty minims of pure ether in the same quantity of oil.

The dose of the etherised oil to commence with is two fluid drachms. In some cases the ether may be given in the same or larger doses in water before meals.

Yours, &c.,

BALTHAZAR FOSTER,
Professor of Medicine in Queen's College, Birmingham.

Birmingham, August 15th, 1868.

J. J. S.—Anyone who can show that he has been in *bond-fide* business as a chemist and druggist can register as such without fee up to the end of the year, and anyone who has been an assistant for a certain time. The particulars will be readily afforded by the Secretary of the Pharmaceutical Society.

R. M. S.—Our remarks upon the subject of hair-washes were general, and did not point especially to the application in question.

Mr. Challoner must send his address, and he shall receive a private note.

AGENTS AND ASSISTANTS.

To the Editor of THE LANCET.

SIR,—As an assistant, may I write a few lines on behalf of the class to which I belong?

In seeking an engagement it is very usual to apply to an agent, who merely furnishes a list of names of gentlemen in want of assistants, and only this, charging the applicant a fee upon his appointment. The complaint I wish to make is, that the whole of the fee—usually a guinea, seldom less—has to be paid by the assistant. Now, Sir, as the accommodation is mutual, surely the employer might be expected to defray say half of the expense, and not let it fall entirely upon the employée, who can but ill afford such a tax upon his limited salary.

I am, Sir, your obedient servant,

August 16th, 1868. D. G.

THE SICK CLUB QUESTION.

THE following correspondence, in addition to that published in our last impression, has taken place on the above subject:—

Oldbury, August 12th, 1868.

DEAR SIR,—I beg to acknowledge the receipt of yours of the 11th instant respecting Mr. W. C. Dempsey, and regret to find you entertain opinions regarding the question in point diametrically opposed to the majority of your *confrères*, as evidenced in the replies I have received from them.

Before submitting the circular to you, I asked the opinion of a most eminent lawyer regarding its legality, and, after two days' consideration, he answered me there was nothing whatever illegal in it; therefore, until proved to the contrary, I must take your first objection as being untenable. Your idea that we wish to coerce any branch of the profession is utterly without foundation, in proof of which I must refer you to the resolutions adopted by the Committee of the Birmingham Branch of the British Medical Association—a body which I am sure you will acknowledge represents fully the profession in the Midland Counties.

Were we to wait until the Medical Council took cognisance of the moral and professional conduct of the members of the profession generally, I fear we should never be able to successfully carry out that system of reform which it is our endeavour to do.

We sincerely regret your unwillingness to assist your less fortunate brethren in their attempt to raise themselves from the somewhat degraded position they have hitherto held in what is generally considered to be a liberal and certainly most noble profession; and while we are deeply pained to have to raise any question of etiquette between ourselves and a distinguished member of the profession, we feel it our duty to still strictly adhere to the terms of the resolution adopted by us.

I remain, dear Sir, yours truly,

Dr. Nelson, Colmore-row, Birmingham. H. SAINSBURY.

Colmore-row, Birmingham, Aug. 13th, 1868.

DEAR SIR,—I am in receipt of your reply of the 12th. It does not alter the face of matters essentially; but a few points require brief comment.

Firstly. As to the illegality, your taking an opinion indicates that there was a preceding doubt in your own minds, such as I now entertain. The opinion given to me arose incidentally; but it came from one who may be ranked first in that department of law, and the principle declared by him was, that a request, accompanied by a threat, especially when emanating from numbers combined together, was an attempt at coercion which was undoubtedly illegal. Any similar resolution, therefore, coming from other quarters could not alter the plain signification of words in the English language.

Secondly. I still must think that all rules for the profession should come from above, and bear upon all alike, justly, uniformly, and universally throughout the country.

Thirdly. If you feel, as you say, that you were formerly in a degraded position (which I, however, never said or thought of you), you must now have emerged from that degradation by resigning your offices, and may henceforth apply that term to those who have succeeded you, as they at present are the "less fortunate brethren," yourselves being in the enjoyment of the calm satisfaction of self-approval in maintaining the dignity of a "liberal and noble profession."

Fourthly. Those who differ from you in this matter—and I don't think they are deficient either in weight or number—claim as great a desire as yourselves to elevate and benefit the profession in every possible and honourable way. They only doubt the advisability of the means now adopted in demanding of all your brethren, as consultants, that they shall not, under the penalty of exclusion by you from practice, meet certain practitioners who have the same qualifications as yourselves, but who have committed the offence of taking your former situations in, as you aver, a shabby manner. Not that I or any one else seek to laud such a proceeding, rather quite the contrary; but my view of the matter may be illustrated by a somewhat parallel but far stronger case which has recently occurred here, in which six gentlemen resigned collectively their honorary offices, unless they each received a honorarium for their services. The common understanding amongst them was, as some of them have informed me, that no one of them should act for himself, or without consent of the rest; yet one of them did accept office with a salary, to the exclusion of all the others. Those others might justly complain of a breach of faith; but they do not pass a resolution such as yours, interdicting, under a threat, all the rest of the profession from acting with that individual if other medical assistance or a surgical operation were required to save the life perhaps of one of his patients.

Feeling that so grave a question should be submitted to the profession at large, I have sent the resolution and reply to THE LANCET, &c. I would never have mixed myself up with the matter had you not requested a definite reply, and I need not assure you that it is given in all sincerity, and from deep conviction alone, as it is evident that motives of self-interest must have carried me quite the opposite way.

Believe me, dear Sir, yours faithfully,

H. Sainsbury, Esq., Surgeon, Oldbury. DAVID NELSON, M.D.

To the Editor of THE LANCET.

SIR,—I cannot allow Dr. Nelson's correspondence and enclosure of last week to pass unnoticed. It would appear from his letter that the Sick Club question was a matter affecting the general practitioners of this neighbourhood alone, and a question of trifling importance involving pounds, shillings, and pence only. Taken from this mercenary point of view, I grant that coercion would be out of place and unbecoming; but, Sir, I would ask Dr. Nelson, and at the same time all the consulting members of our profession hereabouts, is our united effort to raise the position of their hard-worked, badly paid, and, worse than all, badly treated medical brethren a matter of indifference to them? Do they fail to see that the present degrading position of the Club surgeon is a crying scandal and a foul blot on our professional escutcheon, and consequently degrades them as well as us? It would appear so; for the majority of the physicians and consulting-surgeons have stood by, have watched the contest, and have made no sign! I can only say, Sir, notwithstanding Dr. Nelson's legal opinion (and I now assert that I express the sentiments of some twenty of my brethren), that unless we receive some endorsement of our efforts for the common good of our profession, both expressed and acted up to, we shall most certainly use a power which we undoubtedly possess, and make common cause with our Oldbury neighbours.

When the heads of our profession stand silently by and see their brethren defeated in an effort like this, it is time that we make a stand for ourselves.

I am, Sir, your obedient servant,

Wednesbury, August 18th, 1868. W. C. GARMAN.

A Military Surgeon was ordered by a Coroner to make a post-mortem examination and give evidence in the case of a soldier who was supposed to have committed suicide. The Coroner promised him the usual fee of two guineas. He waited two months, and, not having received the fee, wrote to the Coroner demanding it. To this application no answer was returned; and in reply to a second letter, the Coroner said he "would send it in due course, but the Act of Parliament did not state that military surgeons were entitled to it." Our correspondent inquires what course he is to pursue to obtain his fee? In answer, the plea might be raised that the witness was not summoned according to the provisions of the Medical Witnesses Act, which contains a form of summons which the witness is bound to obey under penalty. To this the reply is the promise to pay made by the Coroner. It might be urged that the witness being a "military surgeon" did not come under the first clause of the Act as being in "actual practice;" but this is met by the fact that he was doing his duty as assistant-surgeon to a regiment. "A Military Surgeon," if registered, in our opinion, has a legal claim against the Coroner for the two guineas, and we advise him to enforce his claim in the County Court.

Sigma.—It is doubtful; but he might be summoned before a magistrate.

THE MEDICAL CLUB.

To the Editor of THE LANCET.

SIR,—I shall be obliged if you will allow me, through the medium of your journal, to express my astonishment at the intention of the Committee of the Medical Club to augment the subscription of the original subscribers from *one* to *three* guineas, after an explicit understanding that the object of being an original member was the advantage of the first determined on subscription.

I trust for the credit of the Club and the profession at large that this unjust decision will be at once rescinded, or that all country members, who can make so little use of it, will cease to belong to a Club whose Committee can so wantonly break faith with its members.

I am, Sir, yours faithfully,

August 17th, 1868. ANOTHER COUNTRY MEMBER.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "A Country Member," relative to the proposed increase in the subscription to the Medical Club, I beg to state that it has been arranged that a general meeting will be held at the Club House, Spring-gardens, on Wednesday, October the 14th, at 3 P.M., when the subject will be fully discussed with a view to arriving at an arrangement that, I trust, will be satisfactory to the original members.

Your obedient servant,

August, 1868. LOBT MARSH, Hon. Sec.

J. B. L., (Redcar.)—The advertisement has been frequently alluded to in our columns. The opinion expressed had reference to a collection formed for scientific purposes, and not to the present filthy museum.

A. B. C.—He can dispense his own medicines, but not sell drugs.

THE BRITISH MEDICAL ADDRESSES AND THE UNIVERSITIES.

To the Editor of THE LANCET.

SIR,—After hearing and reading the eloquent addresses and speeches delivered at the recent meeting of the British Medical Association at Oxford, I could not fail to be struck, and I think many others must also have been struck, with one remarkable omission throughout the whole of the meeting. In no address or speech is the slightest allusion made to any other University, if I except one paragraph in the address of the retiring President (who, be it observed, is a Professor in the University of Dublin), where mention is made of the "sister Universities of Cambridge and of Dublin."

I may, perhaps, seem over-sensitive in seriously noticing what might have been an accident; but I should regret to see that such a want of courtesy should, without comment, become a precedent. I am the more struck with this utter oblivion of the existence of other Universities displayed by Oxford when I compare it with the feeling shown in the speeches of Cambridge men at the meeting of the Association at that University in 1864, at which I had not the good fortune to be present. On reading the report of the speeches at that meeting, I see that in the addresses of Dr. Paget and Professor Humphry constant reference is made to "the Universities" and to "Oxford and Cambridge;" and at the public dinner by no means the least honoured toast was that entrusted to Professor Selwyn, who in a most brilliant and eloquent speech proposed "Health and Prosperity to all the other Universities of the British Isles," and paid some most graceful compliments to the distinguished representative of Oxford, then present. At Oxford, on the other hand, as I have remarked before, Cambridge is hardly mentioned, and no toast of "the other Universities" is proposed at the dinner; yet surely Cambridge, Edinburgh, and Dublin were not unworthily represented at this great congress, and are playing a certainly not less important part than Oxford in the promotion of medical study.

Your obedient servant,

August 10th, 1868. M.A.

C.—There is no means of checking such advertisements. It is very doubtful whether they do much harm. The best policy, as a rule, is to treat them with silent contempt.

F. C. S. will find what he desires in Huxley's Manual.

THE POOR-LAW MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Mr. Fleischmann's last very undignified note conveys its own comment. Any further reply from me is therefore quite unnecessary.

In concluding this controversy, I beg to warmly thank you for the insertion of the correspondence, and also for your editorial remarks on the question at issue.

Yours obediently,

ROBT. FOWLER, M.D.,

District Medical Officer of the East London Union.

Bishopsgate-street Without, Aug. 13th, 1868.

MEDICAL ETIQUETTE.

Dr. Alexander, of Halifax, requests us to correct "a statement founded entirely upon inaccurate representation on the part of Dr. Crowther." The statement is contained in our answers to correspondents in the last LANCET. Dr. Crowther asserted that Dr. Alexander had seen a patient of his in his absence. We relied upon Dr. Crowther's statement; but as Dr. Alexander says the representation was inaccurate, we regret the insertion of the notice.

Subscriber.—1. The office of registrar of births and deaths is held by many medical practitioners.—2. It is not a bad introduction to practice.

TONGUE-TIE.

To the Editor of THE LANCET.

SIR,—Having seen in your impression of Aug. 8th an article on "Tongue-tie," I beg to inform you of a method of operating that I have practised for several years. I pierce the frænum at its junction with the tongue with a sharp-pointed pen-knife, the cutting edge of the knife being directed forwards, and divide it by drawing the knife towards me. The advantages of this method over that usually adopted are, its greater facility and precision, the impossibility of wounding the lingual artery, and, owing to the hand being at the side instead of in front of the child's mouth, an unobstructed flow of light.

Yours obediently,

Leeds, August 12th, 1868. PHILIP FOSTER, M.R.C.S.

To the Editor of THE LANCET.

SIR,—Observing in a recent number of your journal an article on the above subject, I infer from the wording it is intended to convey an original idea of that mode of treatment of tongue-tie. Allow me to state that I have adopted the plan suggested for removing the malformation ever since I commenced practice, having when a student at the London Hospital learnt from a worthy late assistant-surgeon (Mr. Gowland) that particular method of releasing the tongue when the congenital deformity existed.

Yours truly,

WARDALE WATSON, M.R.C.S.E.

Howland-street, Fitzroy-square, Aug. 11th, 1868.

T. P. L.—There does not appear to be any distinct order upon this subject; but the common-sense view of the matter is that if the residence or lodging be *bonâ fide*, it would secure permanence of appointment equally as if the officer was a rate-paying householder.

Mr. W. H. Lydall.—The paper shall be inserted in an early number of THE LANCET.

Theta.—Gairdner; Garrod; Fuller.

J. B., (Dublin.)—We cannot recommend any of the nostrums; they are all more or less injurious.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Rolleston, Oxford; Sir H. Thompson; Dr. Ogle; Dr. R. Barnes; Mr. Spencer Wells; Dr. Thudichum; Dr. Henry Bennet; Surgeon-Major Wyatt; Dr. Pollock; Dr. Lory Marsh; Messrs. Weeks; Dr. A. Wood; Dr. Irwin; Dr. Eager, Guildford; Mr. Weston; Mr. Swain, Birmingham; Dr. Jones, Liverpool; Dr. Wyles, Limerick; Dr. J. C. Johnson; Mr. Nowell; Mr. A. Prideaux; Mr. J. Davies; Mr. S. Stretton; Mr. J. Evans, Bristol; Dr. Fletcher, Bury; Dr. Turner; Mr. Lawrence; Mr. Garman, Wednesbury; Mr. J. Dawe, Freemantle; Mr. J. Bright; Mr. Crotta, Glastonbury; Dr. Ritchie, Edinburgh; Dr. Wolfe, Aberdeen; Dr. Macnamara, Mansfield; Mr. Milner, Chelmsford; Mr. Phillips; Dr. Cooper, Bury; Mr. Slocman; Mr. Sandford; Dr. Hall; Dr. Dell, Edinburgh; Mr. Lyle; Mr. Challoner; Dr. Grigor; Mrs. Forrest; Mr. Maunder; Dr. Dawn; Mr. Roberts; Mr. Searle, Doncaster; Mr. Shaw; Messrs. Rose and Co., Leith; Mr. Hindley; Mr. Grant; Mr. J. Leith, Birmingham; Mr. Harris; Mr. T. H. Smith; Mr. Reid; Dr. Parkes, Netley; Dr. Bass, Dorchester; Mr. Beck; Dr. Alexander, Halifax; Mr. Cartwright; Mr. Felce; Dr. Power; Mr. Harrison, Liverpool; Mr. Lydall, Southernhay; Dr. Kernot, West Cowes; Dr. Gairdner, Edinburgh; Dr. Porter, Tarleton; Mr. Fearns, Luton; Dr. Wilson, Manchester; Mr. Newington; Mr. Gow; Rev. W. Kirkus; Mr. Dunne, Exeter; Dr. Anderson, Glasgow; Mr. Lowes; Mr. Cooper, Southsea; Dr. Oswald; Mr. Baines; Mr. Morris; Dr. Lloyd; Dr. Greenway; Mr. Frederick; Mr. Pearce, Trewyn; Mr. Mackaye, Ardgay; Mr. J. Johnson; Dr. Pritchard; Dr. Bantock; Dr. Worthington, Worthing; Dr. Eddison, Leeds; Dr. Rigby, Chorley; Mr. Archibald; Mr. Fyffe, Parramatta; Dr. Nash, Nurcara, India; Mr. Colmer; Mr. Salt; Rev. W. Theed; Mr. Sutton; Mr. Lister; Mr. Slade; Mr. Laird; Dr. Campbell; Dr. Fisher; Mr. Cresswell; Mr. Mackay; Mr. Teak; Dr. Thompson; Mr. Warburton; Dr. Allen; Dr. Coales; Mrs. Shelley; Mr. Harvey; Mr. Kidd; Dr. Fowler; Mr. Mackintosh; Mr. Manley; Mr. Weston; Mr. Doidge; Mr. Heaton; Dr. Madge; Mr. Gaye; Mr. Dunn; Mr. Winchester; Dr. Campbell; Mr. Whalley; Dr. Walters; Mrs. Matthews; Mr. Andrews; Mr. Groves; Dr. Turnbull; Mr. Hammond; Mr. Evans; Mr. Austin; Mr. Livingstone; Dr. Chittenden, Lee Park; Mr. Moore; Mr. Holthouse; Dr. Stevenson; Dr. Nash; Dr. Ross; Mr. Haviland; Dr. Steggall; Mr. Mills; Dr. R.; Royal Horticultural Society; A Country Member of the Medical Club; The Secretary of the Ledwich School of Anatomy; H.; J. J. D.; S. S.; R.; M. B.; Nestor; Chirurgus; A. B. C.; A. B., J. B.; Sigma; E. C.; Theta; R. N. F.; The Secretary of the York Dispensary; Subscriber; Obstetricus; The Secretary of the Royal College of Surgeons of Ireland; Fair Play; Diogenes; Cui Bono; B. S.; A Military Surgeon; Nunquam; &c. &c.

THE *Surrey Advertiser*, the *Midland Counties Herald*, the *Birmingham Daily Gazette*, the *Melbourne Age*, the *Lincolnshire Chronicle*, the *Bucks Herald*, the *Western Morning News*, the *Sheffield Daily Telegraph*, the *Gateshead Observer*, the *Brighton Gazette*, and the *Bendigo Advertiser* have been received.

BURGUNDY WINES. *What more valuable therapeutic agent than a pure Wine rich in Aromatic properties, but free from an excess of Alcohol and Sugar?* Such is PIOT FRERES' BEAUNE, 44s. per doz.

The judicious exhibition of easily assimilated Tonics and non-intoxicating Stimulants in the form of Wine, pure and generous, yet very moderately alcoholic, is often more efficacious than all the fortifiants in the Materia Medica, is a truth that has become generally recognised with the advanced minds of the Profession; and which of the various juices of the Grape is calculated to be of the most active benefit—*instead of the least harm*—is a question that demands the serious consideration of every Practitioner.

The qualities that render Burgundy emphatically the Wine for Invalids in this climate, are its richness in aromatic properties, its freedom from acidity and its comparatively great powers as an exhilarating and sustaining stimulant in proportion to the small quantity of alcohol it contains.

MM. PIOT FRERES have the pleasure to submit upwards of thirty varieties of Burgundy Wines, and offer every facility and assistance to members of the Medical Profession in selecting the Wines best adapted for various diseases, constitutions, and temperaments.

PIOT FRERES, Growers and Factors of Burgundy Wines. London Depôt, 282, Regent-street, W.

FRENCH WINES.—The great increase in the consumption of Clarets has led to the introduction here of Wines, many of which, sold under high-sounding names, are sound and pure, whilst others are vastly inferior. As Wines can only be judged by actual comparison, E. GALLAIS & CO. (WINE GROWERS) recommend a trial of their "VIN DE MEDOC," at 12s. per dozen (bottles included), which they are daily supplying to the Medical Profession and the London Clubs, Regimental and Naval Messes, &c. A single Sample Bottle may be had.

VICHY WATER COMPANY, 27, MARGARET STREET, REGENT TREET, LONDON, W.

For Notice of GREEK WINES, &c., see *Edinburgh Review* for July, 1867.

DENMAN'S GREEK WINES,

GUARANTEED PURE.

Sample Cases made up as desired.

Cases of Six Red and Six White Wines will be sent on receipt of Post-office Order for £1 11s. 4d., payable at Chief Office.

	Per doz.
Ambrosia (from Santorin)	30s.
Como (from Syra) 32s., 36s.,	42s.
*Corinthian Wine, white and red	14s.
Cyprus 60s., 72s., 84s.,	96s.
*Kephisia, red and white (Athens) 20s., 24s.,	30s.
Lachryma Christi (from Santorin)	42s.
Malmsey Muscat (from Samos)	48s.
*Mount Hymettus, red and white 16s.,	20s.
*Patras, red and white 20s.,	24s.
*St. Elie (from Santorin) 28s., 32s., 36s.,	42s.
*Santorin 28s., 32s., 36s.,	42s.
*Thera 28s., 32s., 36s.,	42s.
Visanto (from Santorin)	42s.

* Dry dinner wines.

GAUPHINE, South of France wine ... ... 10s. 6d. per doz.
" in quantities of four dozen ... ... 9s. 6d. "

Terms cash.

Detailed Price List post free on application.

J. L. DENMAN, 30, PICCADILLY, LONDON, W.

Thos. Nunn and Sons, Wine, Spirit,

and LIQUEUR MERCHANTS, 21, Lamb's Conduit-street, call attention to their varied and extensive stock of SHERRIES (Pemartin's shipping):—Good sound Dinner Wine, 28s. and 32s. per dozen; Superior, 36s., 42s., 48s., and 52s.; Amontillado, 52s., 58s., and 64s. They also hold a choice stock of Old PORT WINE (chiefly Sandeman's shipping):—Well-matured Wines, 32s. and 36s.; ditto, with more age, 42s., 48s., and 54s.; 7 to 10 years in bottle, 60s., 66s., 72s., and 84s. CLARETS: good sound Bordeaux, 18s.; superior, 24s.; higher class, 32s. to 50s.; first growths, 56s. to 120s.; these are shipped by J. Violetti and Co., Bordeaux. Rail paid to any station in England.

Established 1801.—Priced Lists on application.

Chamen and Sons (Established

1837), WINE MERCHANTS, TEA DEALERS, GROCERS, and ITALIAN WAREHOUSEMEN, having erected new Premises over their old Vaults, invite inspection of them, which may be regarded as being unrivalled in the Metropolis for their adaptation to the combined Trades and the convenience of Purchasers. With their old and well-selected Stock of Wines, including many of the choicest Vintage, they are prepared to offer in the other department articles of the finest qualities, with the more modern and recent introductions on terms commensurate with the times.

17, Charlotte-street, W. (300 yards north of Oxford-street, in a line with Rathbone-place and directly facing Russell-square.)

Pure Light Wines for the Summer

SEASON.—HEDGES and BUTLER solicit attention to their

St. Julien Claret	18s.,	20s.,	24s., and 30s.,	per doz.
White Bordeaux	24s.,	30s.,	and 36s.	"
Burgundy	24s.,	36s.,	and 42s.	"
Chablis	24s.,	30s.,	36s., and 42s.	"
Hock and Moselle	24s.,	30s.,	36s., and 42s.	"
Champagne	36s.,	42s.,	60s. and 66s.	"
Sherry	24s.,	30s.,	36s., and 42s.	"
Port, from first-class shippers	24s.	30s.,	36s., and 42s.	"
Old Pale Cognac Brandy ...	48s.,	60s.,	72s., and 84s.	"

Claret in hhds., containing about 23 dozens.

No. 1. Good sound Claret	£12	per hhd.
Nos. 2 and 3. Good Medoc	£12 and £15	"
Nos. 4 and 5. Stout Claret	£15 and £18	"
No. 6. Dessert Claret	£25	"
Nos. 7 and 8. Superior Class Wines ...	£30 and £35	"
Nos. 9 and 10. Good Sauterne	£15 and £20	"

All the above wines are strongly recommended and guaranteed by H. and B. Lists of all other wines and liqueurs on application.

HEDGES & BUTLER,

155, Regent Street, London, and 30, King's Road, Brighton.

Ingram & Co. (Wine Importers)

beg to recommend the following Wines as superior to any ever offered to the Medical Profession at the same prices:—

CLARET ... ... 18s. per dozen.
"A very good and cheap wine."—LANCET, Sept. 21st, 1867.

MARSALA ... ... 21s. per dozen.
Free from heat or acidity, fine, old and full flavour.

PORT ... ... 24s. per dozen.
Well matured; a thoroughly sound, good wine.

One dozen of each of the above packed and forwarded, carriage free, on receipt of P.O.O. for 3 guineas payable to

INGRAM & CO., 35, Bucklersbury, London, E.C.

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For use in Hospitals, Infirmaries, Dispensaries, &c. Pure, full-flavoured, fruity, red Wine, of Port character.

"Crown" red ... ... 20s., bottles included.
"Diamond" red ... 17s. "

WHITE CATALAN, nutty Sherry flavour, without heat.

"Crown" white ... 20s., bottles included.
"Diamond" white ... 17s. "

C. KINLOCH & CO., 14, Barge-yard Chambers, Bucklersbury, London, E.C.

SAUMUR CHAMPAGNE, 23s., 27s., 33s., & 36s. per dozen.

OLD MARSALA WINE

Guaranteed the finest imported; free from acidity or artificial heat, and much superior to low-priced Sherry. One Guinea per Dozen. A genuine old Port, of really fine quality, 30s. per Dozen. 3 Dozen and upwards rail paid.

W. D. WATSON, Wine Merchant, 73 & 73, Great Russell-street, corner of Bloomsbury-square, London, W.C. Established 1841. Price Lists post free. Terms Cash only.—For highly favourable opinion of W. D. WATSON'S Old Marsala Wine, see *Medical Times and Gazette*, No. 770; also *Medical Mirror* January, 1867; and Dr. Druitt's "Report on Cheap Wines," p. 154.

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DUBLIN EXHIBITION, 1865.

This celebrated old IRISH WHISKY gained the Dublin Prize Medal. It is pure, mild, mellow, delicious, and very wholesome. Sold in bottles, 3s. 6d., at the retail houses in London; by the agents in the principal towns in England; or wholesale, at 8, Great Windmill-street, London, W. Observe the red seal, pink label, and cork branded "Kinahan's LL Whisky."

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Messrs. S. ALLSOPP & SONS beg to inform the Medical Profession that their Ale, so strongly recommended by the Faculty, may be procured, in casks of 18 gallons and upwards, at 61, King William-street, London, and at the Brewery, Burton-on-Trent; and in bottles or casks from any respectable Wine and Beer Merchant, Allsopp's Pale Ale being specially asked for.

Most important to Families.—

GUINNESS'S XXX PORTER.—J. BEBE invites attention to this Celebrated Porter in Bottle, being now specially ordered to invalids, for its nutriment and strengthening qualities; in fact it has been found, in a great many instances, to supersede Wine in recruiting health and strength. Each Bottle is wired and tin-foiled, and is protected by his label and "Trade Mark." Prices are as follows. Terms Cash.

	Per. doz.
Guinness's Celebrated XXX Porter (small bottles)	2s. 4d.
Guinness's Celebrated XXX Porter (large do.)	4s. 6d.

Ten Vans deliver daily in the city and suburbs, and orders sent to all parts of the World.

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